



MBO TO NUWARA ELIYA:

VII

JAFFNA, TRINCOMALEE, BATTICALOA,

BADULLA, AND THE HAPUTALE

RAILWAY EXTENSION;

ALSO,

A VISIT TO ANURADHAPURA AND

THE NORTH-CENTRAL PROVINCE.

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CONTENTS.



On Board the S. S. "Lady Gordon"	1
At Paumben and Ramesvaram	9
Off Jaffna and the North	22
Railway Extension to the North	33
From Point Pedro to Trincomalee	54
Trincomalee	59
Trincomalee District of the Eastern Province	70
Batticaloa and Eastern Province	80
Batticaloa and Coconut Cultivation in the East	96
The Great Eastern Rice Growing and Irrigation District	111
Batticaloa and the Eastern Province—in Conclusion	121
From Batticaloa to Badulla	132
Passara and Badulla	142
Badulla, the Capital of Uva	145
From Badulla to Bandarawela	148
From Bandarawela to Haputale	153
Haputale: "Happy Valley" and the Railway	155
The Haputale Railway Extension Line	159
Along the New Uva Railway Line	167
A RUN INTO THE NORTH CENTRAL PROVINCE WITH NOTICES OF THE ARCHÆOLOGICAL SURVEY AND IRRIGATION WORKS:—	
Anuradhapura and the Archæological Survey	183

Progress in Purely Native Districts in Ceylon	189
Agriculture in the North-Central Province Now and in Ancient Times	204
The Condition of the Kandyan Sinhalese 50 Years Ago	208
Notes on a Trip to Anuradhapura	201
APPENDIX : —	
The American Mission at Batticotta	i, ii
The Story of Eliza Agnew in Ceylon	iii
The Revival of the Mannar District	xi
The Mahaweliganga Explored from Trincomalee in 1882	xiv
Kalkuda-Bay, the Future Port for Batticaloa : Report of Captain Donnan	xxix
The Maravars of Ramnad	xxxii
The Setupatis of Ramnad	xxxiii
The Progress of Trade and Agriculture at Batticaloa	xxxv
Rice Imports, Exports and Cultivation in the Eastern Province	xxxvii
APPENDIX IN REFERENCE TO ANURADHAPURA AND THE NORTH-CENTRAL PROVINCE :—	
Archæological Survey of Anuradhapura	xlii
North-Central Province or the District of Nuwarakalawiya in 1832	lii
A Trip to Anuradhapura	lviii



INDEX.



Abhayagiri Dagaba	..	.. 184, 224
Agnew, Eliza, The Story of		<i>App.</i> iii
Agriculture at Patticaloa, Progress of,	<i>App.</i>	xxxv
Agriculture in the North-Central Province		204
Aluwihara	.. ..	212
Ambawela	.. ..	175
American Mission in the North	24, <i>App.</i>	i, ii
Anuradhapura	.. ..	183, 214, 228
Anuradhapura, The Archaeological Survey of		183, <i>App.</i> xli

B.

Batticotta		27, 135, <i>App.</i> xxvii
Badulla	.. ..	142, 145, 148
Bandarawela	.. ..	150, 152, 153
Batticaloa	.. ..	82
———, Agriculture in	.. ..	99
——— Bar	.. ..	87
——— Coconut, Superiority of	.. ..	110
———, Dutch Fort at	.. ..	134
———, Monuments at	.. ..	90
———, Progress of Trade at	<i>App.</i>	xxxv
to Badulla, The Journey from		132, 139

C.

Calotropis Gigantæa	..	..	102
Captain Johnston, The March of	..		134
Cattle Murraïn in the Eastern Province	..		124
Coconut Cultivation in the East	..		96
Coffee in Haputale	..	..	154
Cotton Spinning and Weaving Industry of Batticaloa	..	..	93
Cyclonic Visitations to the Northern Province			44

D.

Dagabas at Anuradhapura	..	184	185, 215, 217
Dambulla	..	..	212
Delft Island	..	..	22
Dutch at Batticaloa	..	..	91

E.

Easter Seaton Estate	..	..	100
Eastern Province, Fishing in the	..		58
-----, Rice Cultivation and Trade in the			<i>App</i> , xxxviii
Ekiriyakumbura	..	..	140
Elephants, Exports of, from the Northern Province	..	..	43
Eravur	..	..	135

F.

Fort Frederick	..	..	59
— Ostenburg	..	..	61

G.

Giant's Tank, Restoration of the	..		49
----------------------------------	----	--	----

H.

Happy Valley Mission	..	..	147, 157
Haputale	..	..	153, 155

Haputale Railway Extension Line	159, 167
----- Proposed Stations on the	177, 179
----- Rolling-stock Required for the	178

I.

Irrigation Policy in the Eastern Province	114, 121
----- in the Northern Province	49
----- in the North-Central Prov- ince and Hambantota District	193
Idulgashena	165, 169

J.

Jaffna	30
Jetawanarama Dagaba ..	184, 227
Jungles, Different Kinds of, Native Terms for	238

K.

Kalawewa	198, 202
Kallar Industrial School ..	130
Kahmunai	111
----- Girls' Boarding School	128
----- Hospital.. ..	129
Kanadara	<i>App.</i> li
Kandyan Sinhalese, The Condition of, 50 Years Ago	208
Kangesanturai	22, 43
Kantalay	198
Karachchi Scheme.. ..	49
Karativu Bay	82, <i>App.</i> xxix
----- Coconut Plantations ..	107
Knox's Account of Anuradhapura and its Neighbourhood	232
Kottiyar Pattu	72
Kudiramalai	22

L.

"Lady Gordon," The S. S., Voyage in the	1, 80
Lunugala	141

M.

Madura of South India	21
Mahaweliganga Explored from Trincomalee in 1832 '	<i>App.</i> xiv
Mannar, Capt. James Stewart on a Ship Canal through	55
-----, District of	49, 52
-----, The Revival of the, <i>App.</i>	xix
Matale	210
Memoria', A Modern, at Anuradhapura	235
Mihintale	231, 236, <i>App.</i> ii
Mirisawetiya Dagaba	185, 227
Mission Work in the North.. ..	24
----- in the North-Central Province	240
Moormen of the Eastern Province ..	97, 116
Mt Lavinia, Fancy Ball at	107
Mullaitivu District	50, 57

N.

Nalanda	212
Native Districts in Ceylon, Progress in	189
Naval Dépôt, The Great Eastern ...	69
Nellore	37
New Galway District	176
North-Central Province, Agriculture in the	204
-----, Tanks in the ..	225, 235
Northern Province, Prominent European Planters in the	53
-----, State of the ..	44
-----, Trade in the	48
-----, Tanks in the	49
Nuwarakalawiya	197, 206, 232, <i>App.</i> lii

O.

Onthachchinadam	104
-----------------------	-----

P.

Paddy Culture in the Northern Province	47
— — Husking Machinery ..	110
— — or Rice-growing at Kalmunai ..	110
Pallai District	52
Palmyra Palm in the Jaffna Peninsula	39
Passara	142
Pattipola	175
Paumben Channel	3
— — Station	9
Point Pedro	42
Puliyantivu	133

Q.

Quarantine of Immigrant Coolies ..	13
------------------------------------	----

R.

Railway Extension Northwards ..	11, 33
— — — — —, Haputale	159, 167, 177
— — — — — for Trincomalee ..	63
Ramesvaram Canal Scheme ..	3
— — — — — Temple ..	15
Raminad, Maravars of ..	<i>App.</i> xxxi
— — — — —, Setupatis of ..	<i>App.</i> xxxiii
Rice Cultivation and Trade in the Eastern Province ..	<i>App.</i> xxxviii
Roads in the Jaffna District ..	24
Rukam Tank	139
Ruwanwela Dagaba ..	218

S.

Sea Trip Northwards ..	3
“ Snake Channel ” ..	54

T.

Tambalagam Bay	..	...	74
Tellippalai	..	...	24
Thuparama Dagaba	...	..	227
Tiripane	..	...	214
Tissamaharama	..	...	199
Tobacco Cultivation in the Eastern Province			73
Trincomalee	..	..	59
— — — — —, A Tamil Legend respecting			77
— — — — — District	..	..	70
— — — — — Harbour,	..	...	75
— — — — —, Hot Springs in the Neighbour-			
hood of	..	...	74

U.

Uduvil	25
--------	-----	----	----

V.

Vavuniyavilankulam	...	...	50
"Via Sacra" of the Ancient Buddhist			
Hierarchy	..	..	231

W.

Walawe Works	..	...	201
Wesleyan Mission in the Northern Province			81
— — — — — Eastern Province	..		68
Wrecks of Steamers in Ceylon	..		81

Y.

Yodi-ela	201
----------	-----	----	-----



FROM COLOMBO TO NUWARA ELIYA "BY SEA AND LAND."

BY S. S. "LADY GORDON" TO JAFFNA,
TRINCOMALEE AND BATTICALOA, AND
THENCE OVERLAND VIA BADULLA
AND HAPUTALE.

ON BOARD THE S. S. "LADY GORDON."

"Twice round the world and never round Ceylon" is a reproach on an old colonist, which has scarcely been wiped out by our recent holiday trip. The circumnavigation of the island has yet to be completed, or at least that portion between Batticaloa and Point de Galle. It was no dislike to our good steamer, the "Lady Gordon," that made our part of the voyage end off the Batticaloa bar. We can truly say that the longer we continued on board the more we liked our quarters and her ladyship—a perfect sea boat, as she has proved herself in more than one storm and difficult passage, buoyant as a bird on the roughest seas—and under her careful attentive Commander, we should be well pleased to run to Dunedin, Yokohama or the Pacific Coast in place of round Ceylon in our favourite island steamer "Lady Gordon." We do not say that quite such cheery thoughts prevailed in our own

mind (or over the feelings of our fellow-passengers) during our first afternoon and night out from Colombo. With a monsoon swell behind us and the various cross currents of the Gulf of Mannar to encounter, what could be expected but that "we should suffer for our country" as "Orion Horne" used to put it, and yet what more healthful to the bilious landlubber than a 24-hours' run before, or for that matter against, the monsoon in our island steamboat? Far more than "potion and pill" can the sea-trip be recommended; and with such attractions at the end as a visit to Ramesvaram, a drive over the Jaffna and Point Pedro "champaigns"—the garden of Ceylon—or a sight of the great Eastern Naval Port—one of the three or four finest harbours in the world—or of all three combined with views and landings at other points if not ports on the coast,—who would not give the trip round Ceylon in the "Lady Gordon" a prominent place in their holiday programmes? By-and-by, for those who cannot run all the way round, a favourite trip will be by sea to Ramesvaram and Jaffna and back by the Great Northern Railway, or to Galle or Matara facing the health-giving sea breezes and thence back to the capital by rail; and even run the trip to Trincomalee by the "Lady Gordon" can be balanced by a convenient and enjoyable coach journey from the Eastern Port to Dambulla and Matale in little more than 24 hours and thence by rail to Kandy, Nuwara Eliya, Colombo or the farther South. The route we chose cannot be recommended as equally feasible or easy of accomplishment; but to see the finest and most extensive scene of grain cultivation—of good old-fashioned farming—and of systematic irrigation in the island, it is necessary to land at Batticaloa, and once securely there, there is but a choice of

evils at present as to getting away again! But I am forestalling.

The Jaffna Railway Commissioners will, no doubt, agree with me as to the healthfulness of the little sea trip Northwards, even if "the bag of Eolus" is not found shut up in the boiler of the "Lady Gordon." How great the change in outlook which a single day's voyage from the palm covered coast of Colombo can effect! Drawing near the lowlying sandy coast and islets which betoken the neighbourhood of Paumben, we may well rub our eyes and begin to doubt whether we are not off the Egyptian coast and preparing to enter the Suez Canal. A closer inspection dispels the illusion, and the passage of the Paumben Channel, though not without its inconveniences and even risks, considering the often very strong current and the tortuous course followed, is still only to be compared to one of the bends in the far-famed Canal, the last mile in the smaller Bitter Lake which, however, has often proved a snare to heavily-laden steamers. In our experience of Paumben, we saw how delays arise through one vessel having to wait on another—the S. S. "Aska" having first entered the channel from the other end, our steamer had to hold back until she had passed out. How great the improvement, however, in the facility for navigating this channel within the past fifty years. The Indian authorities deserve full credit for what they have done, and it may be questioned if any greater depth or accommodation be required, notwithstanding all the many examinations and prolonged discussion over a Ramesvaram canal. It is only natural that, quietly anchored opposite the little town or station of Paumben after passing the channel, the subject of the proposed alternative, or indeed grand superseding, canal should be uppermost. How much

time and trouble have been spent over it! Fired with the ambition to emulate the grand success of Lesseps, it was only natural that for some years after the opening of the Suez Canal, British Governors and Engineers should look out for similar undertakings in connection with Eastern navigation. Even astute, self-possessed Sir Hercules Robinson was not above "the last infirmity of noble minds," for he too cast a longing look towards Paumben, and detached Mr. Townshend (of Portsmouth and Portland fame) after his work at Colombo was done—work which first enabled Sir John Coode to design our grand breakwater and connected harbour works,—to examine and report on a new Paumben passage and canal. Previously, Mr. John Stoddart was sent to make borings and take quantities, and then both Stoddart and Townshend reported. The latter engineer was, however, more inclined to improve the existing channel, which he proposed to do at an expense of £1,386,000 including the erection of certain lighthouses, but excluding a needful breakwater to cost one million sterling more! No wonder though Sir Hercules Robinson let the subject drop. But the discussion passed into other hands, notably those of the late Sir James Elphinstone, Bart. He, as an Admiralty authority, commanded considerable influence, and in a letter to Governor Grant Duff, of Madras, he referred to the plans (and estimates) of Stoddart, Townshend, Sir Wm. Dennison and our worthy Master Attendant Donnan—who had for many years during his circumnavigation of the island "observed" and "considered"—and contrasted them all with his own favourite scheme for a new canal estimated to cost £300,000, and including a harbour and all conveniences for the mail steamers to supersede both Galle and Colombo, and prove

the great commercial port for Southern India and the coaling station of the Eastern Seas! This letter led to the detachment of Mr. George Robertson, then acting as "Harbour Engineer for India," to visit, examine and report on Paumben and the neighbourhood with reference to the formation of a ship canal. This was in July 1872, and Governor Gregory readily complied with the request of the Government of India to aid Mr. Robertson, by detaching once more Mr. Stoddart and Mr. J. W. Robertson, surveyors (both, alas, no more), with the S. S. "Serendib" (then under Capt. Varian) and Capt. Donnan, Master Attendant. The party was met at Paumben, by Mr. Dalrymple, Master Attendant of Madras, while Capt. Daviot, Master Attendant at Paumben and Mr. Riedy, Immigration Agent, were ready with all needful local information. Apart from the question of a canal, it is of interest to recall the account of the Paumben Channel, its exposure and risks at different periods of the year, as given by Mr. Robertson in his report to the Indian Government. Here it is:—

"The N.E. monsoon sets in early in November, with heavy squalls and rain. Up to December the weather is generally dark and cloudy, with a heavy sea on the north coast, especially where not protected by Paroo vadum Point. This is the month in which there may be some doubts about efficiency of the shelter at the north end of the proposed canal, and in which the north end of a canal through Tonitory Point would be quite exposed. During December it requires much tact and care in running vessels through the pass. At the end of December the weather clears up, leaving a strong breeze, generally from N.N.E. up to the middle of February. It then moderates, with light variable winds, up to the middle of April, when the

southerly winds set in. The S.W. monsoon commences to blow strong after the middle of May, and continues so up to August, when light variable winds set in (with a couple of days' blowing weather at intervals), until the change in November. When I was in the "Serendib," as it happened, we encountered the worst burst of the monsoon that occurred last year, early in September, off the Basses Rocks. During strong winds vessels are delayed being warped through the pass, owing to the strong currents in the direction of the wind. The current has been known to have a velocity of 6 knots an hour, but is generally from $2\frac{1}{2}$ to 3 knots.

"During the first two or three months of either monsoon there is no change in the direction of the current, the prevailing winds influencing its course, although the tide ebbs and flows. During stormy weather, the level of the sea, on the weather side of the reef, is generally 9 inches to one foot higher than on the lee side; the reef of rocks acting like a weir across the opening between Madura and Ramisseram."

As regards the canal, to make a long story short, Mr. Robertson, condemning Sir William Dennison's scheme and others, selected a line across Ramesvaram island for himself, a little over two miles and one furlong in length, and he estimated the cost at £440,000, exclusive of lighthouses—if such should be necessary—and without provision for a breakwater which he deemed unnecessary, though he (Mr. Robertson) confessed uncertainty as to how the north-east monsoon would affect the northern entrance of his canal; yet he trusted that a considerable amount of protection would be given by the projection to the east of Paruvadam Point on which the great Ramesvaram temple stands.

I confess that my visit to the neighbourhood has, as was natural, given me a new interest in

the risks attending the passage of the present Paumben Channel, when, as at times, the current is very strong, as much as 6 knots an hour—and in the various engineering schemes for superseding it. But I have very little faith in ever seeing a ship canal supersede it, now that the mail steamer traffic is so thoroughly concentrated at Colombo, even though Mr. Robertson felt sure that the current through his two miles of canal would be very gentle, there being no ridge of rocks acting as a weir, as in the Paumben Passage, and that very little dredging would be required to keep his canal open and at the due depth. He acknowledged, however, that for steamers drawing over 20 feet of water the approaches to the canal would always involve ticklish navigation and great caution on the part of the pilots. Nevertheless, the well-known Scottish and Indian Harbour Engineer wound up his report, written in March 1873, as follows:—

“The first and more immediate object in the canal is to act as an auxiliary to the Suez Canal in shortening the passage from Europe to the east of India, and also the route between the east and west coasts of India. The through steamers to and from Europe will find it to their interest to go a little out of their way to call at Colombo (when the breakwater affords shelter) for mails, passengers, cargo, coals, &c. Ramisseram at present is a barren island not connected either with Ceylon or India by road or rail; but should a ship canal be made through Ramisseram, it is rather remarkable to think that this barren island will be the *only point in the peninsula of India, from Calcutta to Kurachee* (not excepting Bombay in its present want of ship accommodation where a large vessel will be able to land and discharge her cargo direct on to a quay, without the intervention of cargo boats.

“I believe that this fact alone will, as labour be-

comes dearer and time more valuable, attract a large proportion of the commerce of Southern India, and perhaps the north of Ceylon, to the Island of Ramesseram independent of the more immediate value of the canal—the shortening of the passage to and from India.”

This reminds us that it was part of Sir John Coode's scheme to throw out quays in the Colombo harbour for large steamers to run alongside and so have “one lift between ship and shore” for cargo and coals. But it turned out that those most interested in “quick despatch”—the Agent of the P. & O. Company for instance—much preferred to have their steamers clear of jetties, in the open harbour with boats working in still water *on both sides*, so insuring double work as compared with a jetty on one side. To turn again to Ramesvaram and Paumben: I may mention that Mr. Robertson's report has assumed another and more important interest than for its proposed canal, through a reference to another engineering work on which the writer was entitled to speak with some authority. I refer to Railway Extension and communication with India. Mr. Robertson wrote:—“It would be quite easy to connect the canal at Ramesvaram with a railway to the mainland; and indeed for that matter *Ceylon and India might easily, and cheaply, be joined together by rail along Adam's Bridge*, for the water in the openings between the sandbanks is very shallow and the banks are very flat.” This testimony—the result of personal observation—very strikingly bears out the off-hand opinion of the most distinguished Railway Engineer in the island and a Royal Engineer officer who—without, however, having visited the spot,—thought that an embankment across Adam's Reef would serve for a Railway line. All this is of local, if

Not practical, interest, what ever may be the political objections to a junction of the Indian and Ceylon Railway system; and no one can visit Paumben and Ramesvaram for the first time (as I have just done) without being impressed with the projects for a ship canal and the union of the Ceylon-Indian Railway systems.

But the Paumben steamer agent's boat is alongside; and worthy, hospitable Mr. Riedy (on whom, as Cooiy Immigration Agent, the prosperity of Ceylon so largely depends) is waiting us ashore!

AT PAUMBEN AND RAMESVARAM.

It is very convenient for passengers when the S. S. "Lady Gordon"—as on the present occasion—can afford those desirous of visiting the far-famed Hindu temples of Ramesvaram the necessary time. The next point of call is Kangesan-turai, the port of Jaffna of the North-East monsoon season, and as there is no object in making that port before daylight, a few hours' stay of the steamer at Paumben causes no delay in the voyage. There is nothing attractive in Paumben station itself, low-lying with abundance of the sand which distinguishes the island and reminds one of Egypt, and with more than Egyptian heat. Arabi and his fellow Egyptian exiles ought to feel at home here and they might do worse than pay a visit to Paumben (and the North generally) when their "souls are vexed within them" and their constitutions affected by the persistent moisture of the Colombo monsoon season. But to the two European officers stationed at this remote point the climate and lonely life must be very trying. It is to be hoped that the Indian authorities provide for their

Master Attendant and Port Officer (Captain Carlyon) rather more liberally than we fear the Ceylon Government has treated their Agent, Mr. Riedy. Succeeding his late brother on a salary considerably below what the latter drew, but with the promise of an increase in due season, Mr. Riedy has now rendered most valuable service for a number of years without the promised recognition, and is now worse off in purse than if he had remained in his own Customs Department, while as regards health, I was shocked at the change in the once ruddy, muscular Irishman—although the pallor and slackness of fibre were only what might be anticipated from continuous years' residence at this hot low station without a change to a hill sanatorium or temperate climate. If the Ceylon Government do not redeem their promise to make Mr. Riedy's position one that will enable him to take comfortable leave, it should be the duty of the Planters' Association to ask "the reason why." For there is certainly no individual so needful to the successful continuance of a full stream of cooly immigration into Ceylon as the agent at Paumben. I am more and more convinced that as far as regards the health of the populous Western Province and the prosperity of the port of Colombo, there can be neither wisdom nor prudence in any attempt to divert cooly immigration from the Paumben, Mannar and great Northern route. The recent exposure of the statistics for immigration at Colombo shows how little *bona fide* estate coolies care for the steamer and Southern route, and I am fully convinced that the policy of Governor Havelock ought to be to discourage—rather than *encourage*—cooly traffic through the capital of the island and the great steamer-port of the East. The precautions already taken in a temporary

lazaretto will not be at all thrown away in view of the occasional quarantine of immigrants for location in the city itself and neighbourhood. But planters and Government will have to come into full agreement with the Principal Medical Officer, the Northern Government Agent and his Immigration Deputy, that the one great thoroughfare for plantation coolies must be *via* Mannar. It is a pity that the P. A. did not return a distinct answer to this effect in response to His Excellency's recent very courteous inquiry. Circumstances are, however, returning a sufficiently clear reply, and the Governor of Ceylon must realize more and more, not simply in the interests of local trade and calling mail-steamers, but with reference to public health in Europe, Australasia, and even in Mauritius and South Africa, the need of minimizing by every means in his power the chances of either cholera or smallpox finding a lodgment, however temporary, in the neighbourhood of the port of Colombo. One special precautionary means is to encourage and develop the Mannar line as the one great, if not sole, route for the stream of cooly migration between India and Ceylon. The most efficient means of development—and the one on which Messrs. Twynam and Riedy are as enthusiastic as even the Jaffna Committee and the *Observer*—is found in RAILWAY EXTENSION. On this and the general subject, I have had the following opinions of a well informed Northern resident placed at my disposal, the remarks having been written early in August:—

“I see by your *Observer* of the 2nd inst. that in Capt. Donnan's half-yearly return only 2,529 coolies are stated as going to the estates on the hills (Kandy). Now, sir, I think it would interest both yourself and the planters in general if you would

kindly ascertain from Capt. Donnan how many of those 2,529 coolies actually went to Kandy by train, and how many of them actually walked from Colombo. It will then give you a fair idea of the number urgently required to be brought from Colombo by train after their landing at Colombo.

"For all the coolies who have to walk from Colombo to the estates on the hills (Kandy) will actually have a more unprotected and unassisted road to travel by, than the coolies who journey from Mannar to Matale where all who could afford to travel from thence by train could do so.

"As per Government list in yours of 2nd inst. the number of coolies by the Mannar route for the six months ending in June were	21,707
For the month of July add	5,839

Total for the seven months	27,546
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"By this, sir, you will see that while 27,546 *bona fide* coolies for the hill (Kandy) estates have gone over via the North route, only some 2,529 coolies, plus some 450 for July or say a total of some 2,979 for the same seven months of this year have landed at Colombo.

"Paumben and the adjacent places in the mainland continue free from cholera.

"If the money which a correspondent some short time ago urged to be given as a subsidy to steamers for bringing coolies to Colombo would only be expended on a section of the Railway Northwards, how much more beneficial would it be to the permanent relief of the whole Northern and Central Provinces as also to the poor coolies; for every section of Railway pushed Northwards means so much nearer the hills for them. Again, please consider that even in the present immigration ships, the Government coolies are only some 8 or 12 hours on board between Paumben and Mannar; and this lumber which actually

was sent by Government vessels via Mannar you will remember was only for a limited number of months out of the 7 owing to the partial suspension of Immigration by the Mannar route this year.

"During the same time, Colombo had also the unusual advantage of a fair trial for the bringing over of coolies from almost all the available ports of Southern India by a fleet of our well-equipped steamers and with all this there have not been brought by all vessels to Colombo even 3,000 Kandy coolies for months. As for the matter of quarantine of vessels at Colombo; the immigration vessels also had to undergo the same rules at the Mannar ports during the said 7 months.

"One advantage for the general good of Ceylon which the immigration vessels have over all other vessels at present taking coolies from India to Colombo is that all coolies carried over are inspected at Paumben before shipping, by both an immigration medical officer and the Indian port medical officer, and none but able-bodied and healthy coolies are allowed to be taken over.

It may be asked what will become of the gradual quarantine by "filtration" provided in the pedestrian journey down the North Road, if Indian coolies tainted with cholera are whisked in ten hours or so from Mannar to the Central Province? Well stationary quarantine, either at Mannar or Dambulla must be provided for the "suspects," while the healthy portion are at once saved the long tramp, with its special risks to health (and even as we have seen of "starvation") apart from the absolute loss of time and labour to both coolies and planters. I am a firm believer in the wisdom of extending the great Northern Railway from Polgahawela via Kurunegala, Dambu'la and so on. Now, it is possible that if coolies bound for districts beyond

Kandy preferred to travel from Dambulla to Matale, rather than go round by railway, the needful medical observation and, if need be, quarantine could best be applied, during the 28 miles' walk between these two stations. Be that as it may, there can be no doubt that cooly immigration has become one of the most important factors in the consideration of Railway Extension northwards. If one very natural result should be the settlement of villages of such coolies in the neighbourhood of wayside stations along the line, on land granted by Government, I feel sure that such settlements would not diminish the number of Tamils from overcrowded Southern India, seeking profitable employment on plantations. Settlements of coolies originally employed in making the great Northern and Eastern roads are not unknown. I have seen more than one during this journey on the Batticaloa-Badulla road, and the Northern route with a railway to carry produce to market could not fail to be popular.

But in landing at Paumben, the chief curiosity is not to inspect the station with its two European bungalows, the lighthouse, or the tidy cooly hospital, the clean smart cooly transport vessels, the plain but neat little church, well-filled school, or other offices—and not even the monument in the beach (getting into rather a dilapidated condition) to worthy Mr. Gibbs—nor to recall the interesting fact that Capt. Dawson, R. E., whose monument stands at the head of the Kadugannawa Pass as denoting his share in Sir Edward Barnes' great military road,—really lost his life some years after when engaged in surveying the Paumben passage.

The "Lady Gordon" 's passengers are bent on

a visit to the Ramesvaram temple indeed—a drive of eight miles across the island from Paumben—by a road which it has been one object of merit-seeking pilgrims to keep up—a road which in some respects reminds me of the route from Cairo to the Pyramids, but which for considerable lengths resembles with its paved tracks, the main street of an ancient city with ruins of temples, bathing tanks, residences, villages on either hand. More especially is this the case as we draw near to the great temple itself around which a considerable population is located, more or less dependent, we suppose, on the money brought and spent by pilgrims from all parts of India; for to the devout Hirdu, Ramesvaram occupies a peculiar position, as the last—but not the least—of the sacred places in the long list beginning in the far North of India, which he is bound to visit in successive circuits of pilgrimages. I have not had the advantage of seeing any great structures on the Indian Continent wherewith to compare Ramesvaram, which, however, far exceeds in extent, height and massiveness of buildings any other temple structure or enclosure in Ceylon. We walked round the walls and freely through the corridors, and without attempting any detailed description from my own pen, which Dr. Eastwick's account in Murray's Madras Guide appended renders superfluous, I may say that in contrast with much that was tawdry or hideous, the loftiness and length of the colonnades and the striking effect of coloured massive pillars, chiefly arrested the attention of our party. The chief priest and his associates were busy with their accounts and the distribution of rice to their retainers, but they affably paid attention to the strangers, and the leader mentioned that the offerings of the last festival

occasion amounted to some R4,000. Of course, this may be well on the safe side, and at any rate it affords no criterion of the amount spent by pilgrims outside in their lodging and eating houses during their stay in the place. Lighted up and crowded by thousands of pilgrims, the high festive occasions must be impressive after a fashion—and also we should say very riskful to health, especially if the water of the sacred tanks we saw inside is used for ablution or anointing, much less drinking! The Indian authorities think so little of the great festivals now that a sergeant and a few constables are all that are told off to keep the peace. But here is the promised Guide-book account of Ramesvaram and its Pagoda:—

“**RAMESHWARAM.**—But the place of most interest in the eyes of the Hindu, and that which confers sanctity not only on Ramnad, but on all the adjacent country, is Rameshwaram. The town stands on an island of the same name, 14 m in length from W. to E., and 5 m. in breadth from N. to S., divided from the mainland by the Pambam or Snake Channel, which is now 1 m. broad. The island is said to have been joined to the mainland, and to have been separated from it in 1484 A. D., during the reign of Achudappa Nayakkam, Raja of Madura, by a violent storm. A small breach was then made, but the water was so shallow that it could be passed on foot till the time of the next Raja Vishvarada Nayakkam, when another hurricane enlarged the passage, which went on widening with successive storms. The passage was further enlarged by the Dutch, when they possessed the island. But the greatest improvements have been made since 1830 by the British Government. Previously to this the passage was excessively crooked, hence its name Pambam, “snake-like,” and the depth at highwater and neap-tides was only about 5 ft., so that boats

without keels, even after discharging most of their cargo, would be often days in getting through when the current was strong. Since 1837 the passage has been dredged, and more than £15,000 has been expended upon it. At the W. extremity of the island of Rameshwaram is the small town of Pambam in lat. $9^{\circ} 37'$, long. $79^{\circ} 17'$, inhabited chiefly by Labbays, who are pilots and boatmen, and about 50 of them divers.

“The *Pagoda*, the great object of interest, stands at the E. end of the town of Rameswaram, which is at the E. extremity of the island. This pagoda of Rameshwaram (from Skr. *Ramah* and *I'shwar* God) completes the Hindu's circle of pilgrimage, which commencing with the Temple of Devi at Hinglaj, a little to the W. of Sonmiani in Sindh, proceeds to Jwala Mukhi (Flame-mouth), near Lahur, and thence to Haridwar and down the Ganges to Orissa, and finishes at Rameshwaram at the S. extremity of India. At p. 355 of Mr. Fergusson's “History of Architecture,” will be found an account of this celebrated temple, with a plan at p. 356 taken from the journal of the Geo. Society of Bombay, vol. vii. The dimensions of the temple, according to that plan, are 672 ft. from N. to S., and 868 ft. from E. to W., from the outer wall which is 20 ft. high. The 2nd wall is 347 ft. from N. to S. not 447 as stated on the plan), and 560 ft. from E. to W. This 2nd wall is surrounded by a colonnade 690 ft. long from E. to W. and 60 ft. broad. The entrance is on the W., under the only finished gopura, which is 100 ft. high, and the visitor will see in the garden on his rt. after entering, what is said to be “a small vimanah of very elegant proportions.” This is called Krishnapuram in the more recent plan in possession of the author of this Handbook, and appears to be rather a Mandapam than a Vimana. In the author's plan the dimensions differ somewhat from those in Mr. Fergusson's. According to the former the length of the outer wall from E. to W.

is 876 ft. instead of 868 ft., and 615 ft. from N. to S. instead of 672 ft. In Pharoah's Gazetteer the dimensions of the external wall are stated at 657 ft. from N. to S. and nearly 1,000 ft. from E. to W. The 3rd temple yard, that is the one next to the outer enclosure, is 702 ft. from E. to W., and 405 ft. from N. to S. After passing the Krishnapuram, you pass on the rt. a tank called the Madhava Pushpa Karini or Mādhava's Flower Tank, Madhava being a name of Krishna. On the l., you have a small chapel called Setu Mādhava Swami Koil. The entrance to the actual lower temple is on the S. and E. sides. Going now round by the street in which the cars of the deities go in procession, until you arrive at the outer E. entrance, you find 2 entrances, a central one which is call Swami Samatior proscenium of the deity's temple, and one on the l. which is called Amma Samati or proscenium of the goddess, his consort's temple. Between is the porch of the 8 Lakhshmis, and on the rt. is Hanuman's chapel. By the centre entrance you emerge into the Anuppa Mandapam or hall, where different deities meet, with a granary on the rt. and Lakshmi's temple on the l., and between the god and his consort's room, what is called Maha Lakshmi Tirtham, a small tank, the sacred water of Lakshmi. Her antechamber is called the Kalyana Mandapam, and has 2 small chapels at the W. end to Vigneshwara, while W. of the Anuppa Mandapam are 2 chapels to Subrahmanya. Passing then an inner enclosure you arrive at a central tower or gopura, which is called the Metta Gopura, and is unfinished, while one on the l. is called the Mangala Gopura, also unfinished. You are now in the colonnade of pillars which is in the plan now under notice, 702 ft. from E. to W. and 405 ft. from N. to S., without counting the corridor at the entrance and an inner rectangle. It is one of the most remarkable structures of the kind in India. It extends from the W. entrance to the 2nd wall, which it quit

surrounds, and thus altogether attains the length of nearly 4,000 ft. The doorways are 19 ft. high, and composed of single stone fixed perpendicularly and crossed by other single stones. According to the "Gazetteer of S. India," p. 391, the length of the colonnade from E. to W. is 671 ft. and from N. to S. 383 ft. and the breadth 17 ft. The ceiling is of vast slabs of granite, with pillars of the same material 12 ft. high raised on a platform 5 ft. high, so that the height of the colonnade is about 17 ft. The pillars are all of single blocks of the hardest granite and are in the principal corridors richly carved. In the central corridor leading from the sanctuary are effigies of the Rajas of Ramnad of the 17 century, to which date Mr. Fergusson assigns the temple, which he thinks may have been commenced a little earlier, in 1550. There are altogether 5 gopuras, of which that on the W. is the only one finished. It is about 100 ft. high. On the E. are 2 gopuras, and all 5 are built of stone, a unique case in Pagoda architecture. Mr. Fergusson says ("History of Architecture," p. 355), "If it were proposed to select one temple which should exhibit all the beauties of the Dravidian style in their greatest perfection, and at the same time exemplify all its characteristic defects of design, the choice would almost inevitably fall on that of Rameshwaram."

The legend to which the sanctity of Rameshwaram is due is as follows:—

"Vishnu became incarnate for the 7th time as the son of Dasaratha, the King of Ayodhya, for the purpose of destroying the giant demon Ravana, who was King of Lanka or Ceylon. Wandering in the forest of Dandaka (so says the S. Indian tradition), in the S. of India, Rama lost his wife Sita, who was carried off to Lanka by Ravana. Rama pursued the ravisher, attended by the devotees, who assumed the shape of monkeys. Their general, Hanuman, made a bridge of rocks from India to Ceylon at Rameshwaram, by which Rama crossed, slew Ravana and recovered his bride.

But when he returned he was observed to have 2 shadows, a sign of sin of the deepest dye. This was because Ravana was of the race of Brahma, and Rama took counsel with the divine sages to discover some means of expiating his crime. They advised him to build a temple and confine Shiva there in a lingam or phallus, which is the emblem of that deity. Rama built the temple, and sent Hanuman to Kailas, the heaven of Shiva, to get a lingam. As he was a long time in returning, and the hour for dedicating the temple was approaching, Rama, induced his wife, Sita, to model a phallus of the white sand on the sea coast. This she did, and Rama set up the phallus so moulded in the temple, which was forthwith dedicated to Shiva. Meantime Hanuman returned with another phallus, and was so angry at being forestalled, that he endeavoured to pull up the other lingam, and broke his tail in the effort to twist it out. Hereupon Shiva and his consort appeared from the lingam and said to Rama, "Whoever visits this lingam dedicated by thee, and bathes in the 24 sacred bathing-places, shall be freed from sin and inherit heaven." Then, to console Hanuman, Rama placed the lingam he had brought on the N. side of the one which had been already fixed, and ordained that pilgrims should visit it first and then Rama's lingam. Such are the monstrous and impure fables of this locality.

The two ladies and four gentlemen of our party—the temple priest was interested to know that "Military," "Banking," "Planting" and "Literary" orders or "castes" were represented—are not likely to forget their evening drive back over the paved road to Paumben. [Sir E. Noel Walker and Mr. Twynam had also occasion to remember their similar drive in 1889.] The pairs of bullocks and the tat ponies did their work well, and hospitable friends were awaiting us, while courteous Capt. Whitley was at hand to see that his passengers

were safely conveyed on board before the "Lady Gordon" left the precincts of the "snake channel."

I was sorry not to be able to accept Mr. Reidy's invitation to stay a few days, and make the visit under his guidance to Ramnad—to land on the mainland of India for the first time! That would necessitate a further journey, for I could not ignore in that neighbourhood the Tamil proverb to the effect that "He who had never seen Madura was an ass." It must indeed be worth seeing, for Madura was the most flourishing capital of South India for many thousands of years from the age of Solomon probably to the date of the English conquest. Out of it, no doubt, issued many of the powerful Pandyan monarchs and leaders bent on the conquest of Lanka and who are responsible for the repeated devastations of the northern half of the island and the eventual conquest which gave the Kandyans a foreign royal dynasty. Madura was, moreover, the seat of learning as well as of mighty Pandyan kings, for I read:—

"It was the seat of a university long before Cambridge or Oxford had come into existence, a university which united in itself the functions of an academy and a royal society of letters, which dispensed fame to poets and conferred immortality on works of genius. It was here that Agastya, the *inventor* of the Tamil language, first taught the rudiments of his grammar, here that the *Æsculapius* of India first gave signal proofs of the value of medical science which he had cultivated to such exquisite perfection. It was here that Siva is believed to have played at performing his famous miracles, sixty-four in number, here that his favourite wife is supposed to have taken up her abode."

Madura is, therefore, well worthy of a visit, and indeed it is described even now as by far the most beautiful city in South India. When railway com-

munication across Adam's Reef is established, how easy will it be to pass from Colombo to Madura and Madras!

OFF JAFFNA AND THE NORTH.

I only hope that the Railway Commissioners may see the little kingdom of Jaffnapatam under as favourable circumstances as fell to our lot—at least considering the limited time at our disposal. The Commissioners will pursue a more leisurely course. Our advantage lay in an unusual fall of rain which freshened everything up, succeeded by a cloudy though not rainy day, perfect for travellers and sight-seers on the flat and usually very hot Northern peninsula. The "Lady Gordon" approached Kangesanturai, the port of Jaffna, during the south-west monsoon, at early daylight. It would be of greater interest perhaps to make the passage to Jaffna in the other (north-east) monsoon, when the steamer has to thread her way among the eight or nine little islands west of Jaffna, passing Delft—Pliny's "island of the sun"—noted in modern days as a breeding place for horses, some R2,000 worth of which are still annually sold by Government—Punkudutivu, Kayts, Mandativu, &c. But apart from the more intricate navigation and greater exposure to monsoon influences in Palk's Bay, the present season has its advantages in approaching the coast. Our first glimpse of the "Kingdom" or Province was afforded by the highest natural eminence within its bounds—Kudiraimalai, a hill rising perhaps 50 feet above the plain, worthy of being treated as a sanatorium in so flat a land, but situated in a neighbourhood not favourable for cultivation as was indicated by several bare expanses among the otherwise palm-fringed

shore. Much more encouraging and fertile appeared to be the coast near our landing point, and the little town seemed to have an air of business and activity, in keeping—at least on “steamer day”—with the reputation of the third port of the island in respect of volume and value of export and import trade. But, alas, for the absence of port facilities: our landing took place pretty early in one of the best available boats, but it involved a transfer to *terra firma* after a rather primitive fashion. But we were only just in time; for as it turned out shortly after we left on our island journey, a breeze and a swell set in towards the open roadstead which forced the “Lady Gordon” to move farther out and made communication with the shore difficult, if not impracticable, for some time, delaying greatly the landing of general goods, and the shipping of a considerable number of bales of tobacco, and a large mass of thorny stick conglomerate which turned out to be the wellknown Jaffna thorny hedge. This supply of vegetation—the “mul-kilavai” of the Tamils (*Balsamodendrum Berriyi* ?) was being sent round to Hambantota, it was interesting to learn, in order no doubt to be planted in the sandy neighbourhood of the town, an experiment following up that of Mr. Colin Murray with palmyras, which we may hope are destined in time to succeed and do as much for the dry south-eastern districts as for the northern division of the island.

At Kangesanturai we lost half of our little saloon party, a lady and two gentlemen for Jaffna, while the other moiety, being allowed by Capt. Whitley from early morning till 6 p. m. before rejoining the steamer at Point Pedro, determined to make the very most of their “day on shore.” A horse

conveyance from Jaffna had been arranged for beforehand, and in this we soon made experience of the far-famed Jaffna roads, which in the 45 miles of the day's driving altogether proved as smooth and pleasant as the best of our Colombo Cinnamon Gardens roads. Greater praise surely cannot be given to the roading of the peninsula. The chief credit is to be given to the late Mr. Dyke, who prided himself on his roads, but he was well seconded by the people; for long ago was it said with authority that "Jaffna is the only part of Ceylon in which the entire population seem clearly to appreciate the value of roads and are anxious to afford every facility, and contribute every assistance for their construction." Our first stage was to Tellippalai, the seat of the very interesting branch of the American Mission under the care of the Rev. T. S. and Mrs. Smith. Unfortunately they were away in Southern India, and it being vacation time, the scholastic and industrial institutions could not be seen to advantage. But some of the native teachers and scholars located in the place did their best to give us some idea of the arrangements, and the work done in "Sanders Hall," and other educational sections, while the intelligence manifested in reference to the carpentry, ironwork, taxidermy, printing and book-binding industrial departments, showed a deep interest on the part of the lads and their leaders in their industrial occupations. Tellippalai has already made a name in the island for its wire-wove mattresses, its well-mounted study, easy folding, rocking or nursery chairs, American organs fitted up in local woods—satin, jak, &c.,—American clocks, stuffed birds, and vernacular (Tamil) books, prepared or mounted at this mission establishment. It deserves very general support, for apart from

a good as well as cheap article being supplied, there can be no doubt of the benefit conferred in the training of deft Tamil artificers accustomed to use their hands as well as their heads. Our next visit after turning a little off the mainland to Jaffna through carefully fenced fields, some of which still bore crops of different kinds of grain, gardens of vegetables or farther on of tobacco—all manifesting the utmost care in culture—was to Uduvil, one of the oldest and best-known stations of the American Mission. Here we saw the venerable Dr. Howland, senior, and his estimable daughter, who, with a large staff of competent Tamil teachers of both sexes, manage one of the largest educational and boarding establishments for girls in the island—perhaps the very largest and most complete. Dr. Howland, though now over 73 years of age, is wonderfully active and interested in his church and “parish” as well as schools. The sight of over 100 Tamil girls from 5 or 6 to, I suppose, 12 or 13 years of age, assembled in their commodious and comfortable though plainly-built hall, and their singing of English, as well as vernacular, hymns and lyrics, was a novel and pleasing experience and one never likely to be forgotten. The dormitories, kitchen, and other arrangements by which the girls are taught to make themselves generally useful, were pointed out, and we were persuaded with kind help, to go further afield (in place of going direct to Jaffna) to see the similar boys’ establishment, or rather “the Jaffna College” at Batticotta. This enabled us to call at Manipay, the station for village and school work of Mrs. and Miss Hastings, who had so recently been bereaved by the widely lamented death of Dr. Hastings so universally esteemed in the North for his good works and devoted loving character.

The drive along this cross-country road for some seven miles to Batticotta, and afterwards for seven more miles by a different road, into Jaffna town, I may at once say, was most enjoyable. Batticotta is surrounded by far-extending arable farms alternated with groves of palmyra and coconuts, and vegetable gardens cultivated to perfection. The Batticotta educational establishment for boys and young men must certainly be the most extensive in the island. Dr. W. W. Howland (son of the veteran at Uduvil) and Mrs. Howland actively supervise, assisted by Mr. Wallace and a large staff. About 400 collegians and scholars of all degrees* are connected with this division of the Mission, and the arrangements for the different branches are most complete, not the least interesting to us strangers being the spacious (though simply built) "hall" or circus for gymnastics. Here we witnessed exercises—in dumb-bell drill (clubs and poles also used), parallel and horizontal bar, trapeze, &c.—such as, I suppose, can be seen in no other native institution in Ceylon. Verily, the Tamil young men at Batticotta are taught to attend to the development and strengthening of their muscles and bodies as well as of their minds and with a Principal and Lady Principal so intelligent and hearty in their devotion to their work, the healthy tone pervading the various institutions was readily understood. It is no wonder though His Excellency the Governor enjoyed his visit, under Mr. Twynam's guidance, to the American Mission establishments and felt bound to "make a note" of the Tamil boy essayist who wound up his paper on the Creation with the statement that Eve was made from the *jaw-bone* of her lord and master! We had an interesting visit at Batticotta

* See *Appendix* No. I. for exact figures.

from the venerable Maniyakar of the division, Valikamam West, who had reminiscences of early days and who, to other kindnesses, gave us an opportunity (along with a friend at Kangesan-turai,) of judging of the excellence of Jaffna fruits, in mangoes, oranges, pomegranates, &c. At Batticotta there is, in a comparatively good state of preservation, a fine specimen of the churches dating from the middle of last century with which the Dutch endowed each "parish" into which they divided their much-loved Jaffna possession. The American Missionaries at several points entered into approved possession of such buildings for their Mission services, and within their walls and in the "God's acres" attached are found mementoes of the devoted men and saintly women who, during the past seventy years, have fallen at their posts in the Jaffna Mission field, far from the homes of their childhood across the Atlantic. In the "God's acre" at Tellippalai and at Uduvil, and in the church of the latter and at Batticotta, many such names came before me in gravestone or wall, including Father and Mrs. Spaulding and Miss Agnew,† who gave over half-a-century each to the Mission and never returned to the Far West; Dr. Poor who was attended in his last illness by Dr. Green (M. D.) would have his little joke even when dying, as he said:—"A *poor* patient and a *green* doctor"! Dr. Green himself after leaving as notable a mark on the island or rather on its sons as any man who ever came to Ceylon—by so many Tamils trained in his medical class—returned to America, only to find that, practically, his lifework had been given to Jaffna. I had the privilege of visiting his home at Worcester, Massachusetts, in 1884, but I found the good Doctor

* See *Appendix*, No. {II. † *Appendix* III.

on his deathbed. Then there were the names of Hoisington, Sanders and Apthorp who used to tease his Virginian wife about her slave-owning relatives, and some more, all classical and revered in the history of Tamil Missions in the North. An interesting feature of the same is the extent to which son and daughter have followed father and mother in this Mission. Thus Dr. Howland, junior, pointed to us the building behind the Batticotta Church (now used as a vernacular school) in which he was born; while Miss Howland is busy at Uduvil; the Rev. T. S. Smith again has taken up the work laid down by his father, Rev. J. Smith, and Dr. and Mrs. Hastings have also son and daughter in the field—the station of the Rev. R. P. Hastings at Udupitti being the only one missed by us in this visit. Mrs. Hastings, senior,—sister to ex-President Cleveland—returns to America, D. V., early next year; but her own and her family interest will, we may be sure, continue unabated in the Jaffna Mission. Our unannounced and unexpected arrival at Batticotta disturbed the hospitable lady of the house (Mrs. Howland) in one of her scriptural classes with her lads, and it was most interesting to see some thirty Tamil lads up to 14 or more years in their retired class-room around this good lady, studying the Scriptures. The American Missionaries do not neglect evangelistic work by any means, but they have ever been noted and thoroughly practical educationalists. Many of them have doubtless shared Dr. Duff's favourite belief that it was better to turn out *ten* thoroughly instructed and well-equipped Christian young men among the people of Calcutta (and Jaffna) than a thousand with a mere smattering of Christian knowledge. And notwithstanding all,

we in Colombo and the South hear from time to time of the clever, educated—but practically non-Christian—Jaffna native (balanced, however, even in the metropolis by a large body of truly Christian good men and women who owe all to Northern Missions), it is impossible to visit, observe and travel through the peninsula without seeing that scores and hundreds of Christian homes have been established through the work of Missions, and that the testimony borne to the Board of Foreign Missions in America by Sir Emerson Tennent, after his first visit to the district, is fully justified by later experience. Tennent wrote :—

“ The whole appearance of this district bespeaks the efficacy of your system. Its domestic character is changing, and its social aspect presents a contrast to any other portion of Ceylon as distinct and remarkable as it is delightful and encouraging. Civilization and secular knowledge are rapidly opening the eyes of the heathen community to a conviction of the superiority of the external characteristics of Christianity, and therefore creating a wish to know something of the inward principles which leads to an outward development so attractive. Thus the schoolroom, operating simultaneously and in harmony with the pulpit and private counsel in pioneering and preparing the way for the course of that spiritual enlightenment, which I firmly believe, will ere long pour forth in a flood and preserve its wide and calm career comparatively unimpeded, for every serious obstacle will have been gradually but effectually removed beforehand.”

In one respect, I could not help feeling during this visit to the North—as afterwards in the Eastern Province—the great advantage held by the Missionaries to the Tamils over most of their brethren in the Sinhalese districts, at any rate in Colombo, Galle and Kandy. It lies in the

far closer relation existing between them and their native work—the absence of calls on behalf of English-speaking congregations and operations which necessarily absorb so much attention in the South. Of course, there are English services by missionaries in Jaffna, and, I suppose, in Batticaloa and Trincomalee: indeed at the last-mentioned port, it was quite a novel sensation hearing High Churchmen even bewailing the approaching departure to another station of an eloquent and devoted young Wesleyan Missionary (Mr. Knapp) who had done so much good work among the military and townspeople and inspired respect for his Christian teaching and manly bearing on all sides. Nevertheless everywhere in the East and North, the work among the natives—the Tamils—comes pre-eminently *first*; while each of the American Missionaries at their country stations in the peninsula (with no European or Eurasian within their circuit of work) may well say:—"I dwell among mine own people." May those people—the Tamils of the peninsula—more and more value their privileges and esteem the devoted men and women who have come so far to teach them and to do them good.

The town of Jaffna appeared to advantage as we approached it from Batticotta in the early afternoon. In contrast to the expanse of lowlying fields and bare tidal shore to the west, the fort looked quite commanding in position. Looking at the flat and apparently stoneless country comprised in the peninsula, surprise may be felt as to where the materials, especially for the walls, were obtained to construct the Jaffna Fort. Indeed it is related that the Dutch quarried blocks of breccia from the seacoast; and the worn surface of part of the walls clearly shows the shells

and corallines composing such blocks. The native town in its many admirable streets looked the perfection of cleanliness, though the continuity of close fencing, preventing the free circulation of air, could not but be objected to in the case of the dwellings of Hindus and Moormen. There is no want of open spaces, however, on the fort and esplanadesid of the town. The latter looks well with the "Longden clocktower," though the timepiece like its founder is inclined to "wait-a-bit" or "bide-a-wee" occasionally. Inside the fort the most conspicuous object is the old Dutch Presbyterian church after the pattern and very much of the size of Wolvendal. Facing the esplanade are the Anglican and Wesleyan churches, and close to the latter the headquarters of the Mission in an ancient Dutch residence. This has been added to from time to time in order to accommodate the very extensive educational establishments both for boys and girls with a training institution for teachers just over the way,—all carried on under the immediate superintendence of the resident Missionary and his wife, for the time Mr. and Mrs. Restarick, with Miss Stephenson in charge of the girls' boarding school. The work done here by a succession of able and devoted Missionaries of both sexes, the Percivals, Kilners, and Riggs, has had a notable effect on the youth and manhood and womanhood of Jaffna. We passed through the different class rooms as interested spectators, and the news spread that the "head inspector of all" (somebody above Mr. Green himself!) had come—the reference clearly being to the dignified commanding air of our military companion who, during this day's outing, saw and learned more of Mission work among natives than a long course of service in the East might ordinarily have given him. To the Major

we appeared as Mercury, or in the relation of Paul to Barnabas when Paul was "the chief speaker"! Our time in the town was very brief, and our regret great, that—distances being considerable—we were unable to visit the Kacheberi and Government offices generally, and pay our respects to the "Rajah of the North" whom we had met shortly before when in Colombo "speeding the parting and welcoming the coming" Governor. Whatever may be said of backwardness in the Wanni—of the need of irrigation and other improvements in outlying districts of the province—so far as Jaffna and its province are concerned, one has only to look around (*circumspice*) to see an all-sufficient lasting memorial to the administration of Messrs. Dyke and Twynam. It was considerably past 4 p.m. before we started from Jaffna esplanade for Point Pedro—a distance of 21 miles, and our Commander had only given us till 6-30 to join the S. S. "Lady Gordon," so that even with a relay of Mr. Strantenbergh's ponies on the road, it was a question whether we should not miss our steamer. Moreover, almost the only engagement made before leaving Colombo was that we should visit our good friends, the Rev. J. and Mrs. Pickford, who had recently taken charge of the Church Mission in the North with headquarters at Nellore. Before, however, reaching that suburb of the capital we had a message that enthusiastic Father Lytton of Railway fame was on the look-out for us, and our coachman seemed to know all about it and what to do, for, without a word, he drove into the quadrangle of St. Patrick's College where a juvenile brass band, in neat uniforms, were performing. This is the only band in Jaffna and entirely composed of young Tamil lads, some of whom at least belonged to families or "castes," who considered it greatly beneath

them to touch wind ("blowing") instruments, but the "Fathers" remaining firm as to the foolishness of such prejudices and determined to make no caste distinctions—even though some mothers besought them with tears—the result is now a very competent, contented, indeed proud band of players. Most of the pupils were absent, but those who were hastily called together and made to stand in line by the Principal, Father Dunn (like Father Lytton, from the Emerald Isle), were sufficient to show the great importance of the institution.

RAILWAY EXTENSION TO THE NORTH.

The Chairman of the Railway Committee had much to say about the Great Northern line, the conversion of Mr. Twynam to a belief in its necessity in connection with cooly immigration, its bearing on the future of the young Jaffnese already overcrowded in their highly-cultivated peninsula, the comparative ease of construction along a level route between the eastern and western waterways, with an abundant supply of timber for sleepers and all other purposes alongside the line, and so on. Listening to the enthusiastic Irishman, and fully sharing his desire, to see the Northern Province linked on to the Railway system of the island, I could only hope that there was not before him and all of us any such prolonged period of discussion and delays as has marked the Uva line, originally asked for in 1872 and realized probably in 1892! * The physical conditions are, however,

* It is worth quoting here the first deliverance of the present writer on the project of a Jaffna Railway: it was penned with reference to a letter which Father Lytton addressed to the *Observer* on 28th Oct. 1885, on which we remarked editorially:—"Before Extension Northwards can be even mentioned to the Secretary of State, we shall have to convince him, by renewed revenue and especially railway financial prosperity, that

very different—a line from Kurunegala northwards being comparatively child's play in all but length.

the public creditor is most fully provided for in the surplus profits of our railways, harbour, and even water-works. Nevertheless there is a great deal of preparatory work to be done both in Jaffna by an unofficial Committee of Enquiry and afterwards in Colombo by an official Commission (if such be granted by Sir Arthur Gordon) before matters can be ripe for an appeal to Downing Street. There are one or two great advantages possessed by the promoters of Railway Extension towards Mannar and Jaffna over those appertaining to almost any other island project. First, it may be called a proposal of Imperial—certainly of Indian as well as Colonial—importance and one which is therefore sure to attract readier attention from Governor, Secretary of State and, if necessary, Parliament. Next, it is largely, if not entirely, for the benefit of the people of the land, of the Ceylonese—the Jaffna Tamils especially—although we can also show its advantages to the people of Southern India, and especially the immigrant coolies, and therefore, of their employers, the Ceylon planters. Thirdly, the proposed railway would not only make the buried cities of Ceylon (about which so much interest is felt) readily accessible, but would certainly give an immense impetus to the development of the large districts in the North and East, to which the official mind and the spare cash in the Treasury in Ceylon have, for many years back, been so freely devoted. It is quite possible that, if Governor Gordon comes back with power to carry the railway to Haputale and to Bentota, and with liberty to borrow for Irrigation Works, and prepared to consider impartially the need of completing the Colombo Harbour by a Northern Arm and Dock, he may refuse to touch railway Extension Northwards. If so, however, we can only go on preparing the question for his successor. Taking Ceylon, as a whole, it is indeed only '10 o'clock' in the history of the modern, material, intellectual, and moral development of the island, and we feel sure at this moment that it will not require half the time or persistency to ripen agitation for Railway Extension Northwards into action, that have had to be excited before the authorities practically abandoned the Railway cry adopted in Sir Hercules Robinson's time of 'Nawalapitiya and Finality.' It is a healthy and encouraging sign to see the Tamil gentlemen of the North meeting to confer about a Railway to Jaffna, and no effort shall be wanting on our part to support a judicious movement to secure this end. But let it be clearly understood, that at the outset there must be a good deal of careful, patient, self-denying labour in collecting reliable information such

Aye, there 's the rub—for the “sum tottle of the whole,” even though low per mile, mounts up to a big sum when applied to 100 or 150 miles. There is, no doubt, a strong case to be made out of the settlement, colonization and development of now unoccupied country which would ensue, out of the latent resources of the North-Central Province, out of the forest wealth and coolly traffic; but whether this will enable the Railway Commissioners to recommend the undertaking as a whole, remains to be seen. We sincerely hope they may be enabled to do so, and strong points should be made of the supersession of long lines of roads, and of the saving to public officers of all grades in health, time and expense, through being enabled to travel from station to station by rail. Still it is

as can be used in an appeal or Memorial to Government. *Festina lente* must here again be the motto.” In June following, we revised the first Memorial for Mr. C. Strantanbergh, Secretary to the Jaffna Committee, and added the following two paragraphs—“Your Memorialists need not refer to the great change wrought in the trade of Ceylon through the cultivation of New Products practically unknown in the island 10 to 15 years ago. The land and climate of the district through which the proposed railway would pass may not be suitable for tea or cinchona; but a good deal might be done, in selected spots, with cocoa and cardamoms, and still more generally with tobacco, the pepper-vine, and several palms, more especially palmyra, apart from the extension of grain, fruit, and vegetable cultivation. “The extraordinary development of the passenger traffic, above the estimates on the existing railway lines, is a strong encouragement to anticipate a large and increasing support between the crowded Jaffna peninsula and the intermediate districts, as well as the populous Matale and Kurunegala divisions. From the ‘Ceylon Directory’ we find, that while the number of passengers on the Colombo and Kandy line in 1868 was 196,722, by 1876 it had increased to 879,308; while in 1884, on the upcountry and seaside lines, it was 2,111,334. Railway travelling, in fact, every year becomes increasingly popular with natives of Ceylon, whether Sinhalese or Tamils, as well as with immigrant coolies.”

possible that Sir Arthur Havelock and his advisers may shrink from taking up all at once a railway from Polgahawela to Jaffna or Mannar, and may decide to work by instalments. In that event I trust the Government may see its way to make the first section extend, at least, from Polgahawela via Kurunegala to Dambulla (if not to Anuradhapura). Dambulla at this moment may be said to command the lines of communication between the Western, North-Western, Central and the North-Central, Eastern and Northern Provinces. The coach service between Dambulla and Trincomalee is doing so well that the route has become quite a favourite one for passengers bound to Batticaloa as well as to the naval station. With a train service direct from the capital to Dambulla the whole journey to Trincomalee could be done in about 24 hours—or leaving Colombo by the 2 p. m. train the passenger for the east coast should (exchanging rail for coach at Dambulla by 7 p. m.) be landed opposite the finest harbour in the world (perhaps) by the same hour or say 3 o'clock the following afternoon. What such an instalment would mean to the North-Central and even Northern districts need not be recapitulated. Of course, Jaffna residents could only be satisfied with such a section on the clear understanding that it was a step—and a pretty big one—in the right direction for the Great Northern railway of Ceylon, and indeed it would be a pity to delay so desirable a work by making a division. Therefore, most cordially do we urge Father Lytton and his Jaffna Committee to work their hardest for the line,—the whole line and nothing less,—and to this end let them inscribe on their banner the famous sentences of Macaulay as to the superior influence of improvements in locomotion or in

abridging space, over all other improvements in promoting civilization and the progress of the people concerned. I have not the passage by me to quote in exact terms. How great the change railways have brought about in the old country may be judged from the fact related by Sir Walter Scott that in his day the posts between London and Edinburgh were carried in a small mailcart and he had seen the post come in with only one letter addressed to the manager of the British Linen Banking Company!

Though so late for our engagement at Point Pedro we did not miss Nellore, I am glad to say: the fine old church is situated in what may be considered the most pleasant suburb of Jaffna—distinguished by umbrageous trees and an abundance of vegetation. We were glad to find Mr. and Mrs. Pickford so fully entered on their extensive and responsible work—a work which, it is feared, caused the premature death of the Rev. E. M. Griffith through its pressure of manifold duties. Mr. Pickford was enjoying better health than in Colombo, the overseeing and directing of Chundikuli and Kopay as well as Nellore stations entailing a good deal of traveling. We visited the very interesting girls' boarding school so intimately connected with the earnest labours of Mrs. and Miss Griffith, and now under Mrs. Pickford's care; and then Mr. Pickford accompanied and helped us along our road as far as Kopay church, the steeple of which in the great "cyclone" of December 1884, was blown down, falling into and exactly filling an adjacent well! The station is a flourishing one and a training institution for teachers and catechists is located there.

Continuing our journey, we had now a wide

stretch of agricultural country before us and plenty of leisure to observe various forms of agricultural labour among the most industrious people of the North. Working at their wells, raising water for irrigating their fields, was that which more particularly claimed attention. Well sweeps, such as may be seen in the gardens of some Tamils in Colombo, were universal ; and the walking up and down the long lever as the bucket rose and fell must be wearisome labour when continued for hours. Occasionally two men, or father and son, stood on the sweep, while a third attended to the bucket. The care taken of the water and the "neatness" of the fields and little vegetable gardens were very striking. Here were half-a-dozen labourers busy digging—trenching in manure under the farmer's direction, probably for a crop of tobacco. Here again a large herd of cattle, or of goats, or rather Jaffna sheep returning home from such pickings of pasture as could be found on roadsides or damp hollows, while the goats and sheep showed their agility, in this the dry season, in standing up to the lower branches of trees and making a meal of the leaves. Here again were boys watching for the ripe fruit of the palmyra to fall. Of course, it is wellknown that what the coconut is to the Sinhalese between Colombo and Galle, that and much more is the palmyra to the Tamils of the Jaffna peninsula. There is no need that I should dilate on this topic, for any reader specially interested can refer to the late Mr. Wm. Ferguson's "Monograph on the Palmyra" (a new edition of which with illustrations was recently published) ; but I may quote one short passage, where he says:—"It is not exactly the wholesomeness or the edible qualities of the palmyra tree that make it so important to the inhabitants of India, but simply the fact that thou-

wands, perhaps millions, of the people can procure the fruits from their own palmyra groves or purchase them at a low rate from their neighbours, whilst rice and other articles of food are frequently so expensive as to be placed quite beyond their means. The palmyra tree is in this respect what the potato has so long been to the poor people of Ireland." Another writer very briefly refers to the value of the palm to the people as follows:—

Besides the many uses to which the tree and its products are applied, its supplies in toddy (sweet and fermented) panattu (the preserved juice of the fruit) odials (the roots from the nuts which are buried in pits after the juice has been squeezed out for panattu) and in jaggery a very considerable proportion of the food of the people, and the manufactures of mats, baskets, &c. from the leaves and stalks gives employment to a large number of women and children of the poorer classes.

It was refreshing to see so many "topes" and groves of palmyras all through one day's travel—and also to note the grand umbrageous and stately tamarinds with their useful fruit, the rich foliage of numerous margosa trees as well as flourishing mangoes,—for with the steady, continuous export trade in palmyra timber, (rafters especially) one feared that the people were sacrificing to present need, or greed, a future means of comfortable sustenance. Of course, it is impossible to say from a mere casual visit whether planting (to make up for the cutting down) of palmyra palms is fully maintained; but the question is one which might well engage the attention of the officers of Government. Very probably it has done so; and surely if the application of a little mild "rajakariya" were excusable anywhere, it

would be in reference to compelling the people to plant for their own benefit or that of their children, to compensate fully for what trees they cut down. To show that there is some reason for these remarks, it may be mentioned that the export in 1888 equalled 284,000 palmyra rafters valued at Rs68,900, and that this was only an average annual shipment from the Northern Province for recent years. This must mean a very large number of palmyra palms cut down, say, within the past ten years. It would be reassuring to learn in Mr. Twynam's next Administration Report that the area covered by palmyras in his province is fully maintained, or even extended.* Many years ago the late Dr. Kilner urged in the *Observer* that steps should be taken to plant the sides of the whole North Road from Jaffna to Dambulla with nuts of the palmyra palm, certain to grow, he thought, if the planting was done with ordinary care. The result would be one continuous avenue of palmyras which more than anything else would lead to the settlement of Jaffna Tamils all along the line following their beloved palmyra! This palm must certainly be much hardier and better able to stand drought than the coconut. Through the failure of monsoon rains and a prolonged drought we heard of large numbers of coconut palms dying in the plantations near Pallai shortly before our visit; but we heard of no palmyras suffering. It is

* Mr. W. F. reckoned in 1850 that 1-14th the area of Jaffna and the islands (700 square miles in all) or 50 square miles = 32,000 acres were covered with palmyras at an average of 200 to the acre or a total of 6,400,000 trees. In 1884 Mr. Twynam returned the area planted with this palm in his province as 38,117 acres giving a crop of 72,516,381 nuts. There were besides in that year, 390 acres in the North-Western, 318 acres in the Eastern, 16 in the North-Central, 11 in the Central, 5 in the Southern, and 3 acres in the Western, Province of palmyras.

difficult to say which is the more graceful, the almost universally crooked or bending coco or the strictly upright palmyra; but I think Miss Jewsbury's often quoted verse more applicable to the latter palm than the one she wrote of —

Those coco trees not fair in woods
But singly seen, and seen afar,—
When sunset pours his yellow floods,—
A column and its crown a star!

I must not omit to note the fact that the export of palmyra timber from Jaffna is a trade of very long-standing; for I find it mentioned that the practice of keeping large piles of palmyra timber (ready for shipment) along the coast at Point Pedro, led the officers of the British fleet when it appeared in the neighbourhood in 1795 to suppose that these piles of timber were batteries ready to give them a warm reception!

But we are now hastening on towards Point Pedro: we crossed a great estuary of the sea (Sirukali?) by a grand viaduct, and the view over the expanse of low fields with the estuary running out to meet what seemed the ocean in the distance, led our military companion to exclaim, "the Medway!" and certainly the resemblance to that low-lying part of Kent was very strikingly seen as the shades of evening were falling. In the immediate neighbourhood of Point Pedro, the village cultivation—horticulture and market gardening—has always been described as carried almost to perfection, every house or hut has its carefully tended garden, with fruit trees or beds of vegetables or both, each with its well or wells and enclosed in a perfect fence. These fences, by the way, among the Jaffna Hindus in the country as well as the towns, have one useful (?) purpose in keeping off the effects of the "evil eye" in which they are firm believers!

If a man has a flourishing betel vine, or fine bed of vegetables, he attaches some importance to shielding it from the influence of the covetous or envious !

It was quite $1\frac{1}{2}$ hour beyond the time appointed when we drove into Point Pedro, but instead of our being late, we soon found that the "Lady Gordon" had not yet made its appearance! The sudden breeze and swell which sprung up after we landed at Kangesanturai had interrupted loading and landing at that open port, so that most of the day was wasted, and in place of 6 p.m. it was midnight before her ladyship appeared. This gave us the opportunity to learn a little more about Point Pedro especially through the aid of the intelligent medical officer, Dr. Levi Strong, whose good lady besides being a devoted Christian worker, has shown a special example to her Tamil sisters by studying medicine and developing such an aptitude for business that Mrs. Strong was likely to be nominated the local agent for the steamer, an office she, (having no family cares) is, we are convinced, well qualified to fill. Mr. Rigg, the head of the Wesleyan Mission, and who now resides at Point Pedro, was absent at Trincomalee, but Mrs. Ridsdale, who had lately arrived to take charge of the large girls' boarding establishment, was at her post,—rather a change for her (the only European lady at this *ultima thule* of Ceylon) from her home in the centre of England, where in bygone days she had the honour of being a personal friend of the well-known "Sister Dora" and a sympathizer in all her good work. Point Pedro is a little town of 10,000 people, and, as we have said, the northernmost point of Ceylon—the native name originally being Paruttitturai or "cotton

harbour " through cotton having formerly been freely grown in the neighbourhood—but the Portuguese changed this to "Ponta das Pedras" or "rocky point." Dr. Strong has been using his influence to induce the people to try again the cultivation of cotton—with seed supplied by Messrs. Darley, Butler & Co., and with the promise of success. It is curious to read of H. M. 52nd Regiment invading and occupying Point Pedro "Fort" from Negapatam and thence marching to Jaffna. But if one entered on the early or even modern history of the peninsula and the prolonged fighting of which it was the centre, our letter would develop into a volume. How strange to read even as tradition that the "King of Jaffna" some 500 years ago organized a fleet in which an army was carried to fight against the troublesome Moormen and their forts at Chilaw, Negombo, and Colombo! Of the great coasting trade to and from Jaffna in the past much could be said, also of local industries, in boat and ship building, spinning and weaving cotton, working in metals, especially as jewellers, &c. The "King of Cotta" in 1410 is said to have loaded a ship at Colombo with goods to despatch to his son, the "King" or "Prince" of Jaffnapatam. The prosperity of the little peninsula was, however, we may be sure, never greater than at present. The growth and export of tobacco, a really important industry, of sheep, cattle, &c., and of palmyra timber, enables the people to buy grain (and all other necessities) to supplement their local production; there is a considerable trade in chank shells—we found the shore in front of the Custom house at Jaffna strewn with bags or piles of them ready for shipment to Southern India. An average of some 50 to 60 elephants are shipped yearly from the Northern Province (paying Rs. 1,000 a head each as royalty to Government); but

we found afterwards when at Batticaloa that perhaps half of this number are from other than the Northern Province ! At any rate the Government Agent of the Eastern Province gave passes for 21 elephants caught in his territory which were to be travelled overland to the North for shipment. The resulting export revenue should, therefore, be divided.

Before leaving the North, it may be well to afford some idea of the latest Administration Reports (for 1889) by the Government Agent and his assistants, as these have not yet been reviewed in your columns. Mr. Twynam describes the past year as one of some trial to the people owing to the abnormal weather and the failure of the usual north-east monsoon rainfall. This led to a decrease in the revenue, but this deficiency was only R70,559 in the ordinary collections which aggregate about R650,000 to R715,000 for the Northern Province, although in 1888 a Pearl Fishery added R802,228, and a sale of Delft horses R2,030 to the account. One considerable item in the revenue collection is "Firewood," and under the auspices of the Forest Department the formation of depôts for the supply of timber and firewood at all the provincial towns is likely to lead to considerable and growing receipts.—While we congratulate ourselves in Ceylon on our freedom from cyclones or volcanic disturbances, it is well-known that the effects of cyclones in the Bay of Bengal are not unfrequently felt in Palk's Bay, while occasionally the storm touches and devastates the adjacent coast and peninsula of Jaffnapatam, very rarely reaching farther south. Captain James Stewart, so long Master Attendant at Colombo, in his "Notes on Ceylon," discussing Colombo roadstead at a time when he was urging the calling of mail steamers there in preference to

Trincomalee, wrote :—

“Heavy gales of wind do not prevail so near to the equator as the south-western coast of Ceylon is situated.

“The circular storms of the Bay of Bengal have sometimes extended to the Northern Province; but so far south as Colombo, they have not been felt oftener than about once in 17 years, and then they were not sufficiently strong to endanger ships properly equipped with anchors and cables.”

Again, in a later paper he wrote :—

“It is true that at intervals of from 14 to 17 years, the Southern margin of the cyclones, which are felt to the Bay of Bengal, and sometimes at Jaffnapatam in the early part of the North-east monsoon, have been felt for a few hours at Colombo, to the injury of unprepared shipping; but those well found with ground tackling—that ground tackling kept in good order and timely availed of—have nothing to fear when at anchor in Colombo roads.”

Old colonists are aware how true these remarks are as regards the exemption of the south-western portion of the island; but unfortunately within the past few years, the North has had repeated adverse experience, while Captain Whitley has had on several occasions to congratulate himself on the good sea qualities of his steamer in encountering the tail-end of cyclones after passing Paumben: the latest encounter of the kind seems to have been when carrying the Railway Commissioners the other day. Meantime, here is Mr. Twynam's account of the cyclone which struck his province in December last :—

“On December 23rd a telegram was received to the effect that a cyclone in the Bay of Bengal was advancing towards the south. I was travelling at the time in the Wanni, and the tail of the cyclone seemed to strike Ceylon between Karachchi and

Mullaattivu. Coming across from the new road between Puthukkudiyiruppu and the sea coast at Nallatannitoduvai, three miles south of Ohundikkulam, we felt the full force of the gale from the north-west with heavy rain, which knocked up the coolies very considerably. The sea was rolling in heavy rollers on the beach. The gale subsided during the night, and the wind gradually went round to north-east. I was surprised to find, when reaching Mattalan, that there had been very little rain there, and to receive reports from Jaffna that there had been very little indeed there, although the wind had been strong from the north-west. I was in hopes, when I looked in the direction to Jaffna from Nallatannitoduvai, that they were getting rain enough to save the paddy crops, which were then withering from want of rain.

"When I reached Olumadu, near the Central road, on my way back to Jaffna, I heard from the headmen that the gale had passed over the Punakari division and the Tunukkai and Panankamam pattus, and that the rain had saved the paddy crops of Punakarai and of the two pattus. I found that there had been heavy rain in the Karachchi, close to the road between Iranaimadu and Elephant Pass, but very little in Iranaimadu. West of Elephant Pass there had been scarcely any rain.

"It was curious to see how very partial the fall of rain had been over the whole Province during the last three months of the year—"the rainy months." In the Mantottai North pattu of the Mannar district there had been good rain in some villages, very little in others; in the Nanaddan west there had been heavy rain; in Musali north good rain; in Musali south and south of the Moderagam river scarcely any. The tanks round Vavuniya-Vilankulam were almost dry, whilst further north there had been good rain in October, as also in the west, in Panankamam,

and Metkumulai. In the Mullaivittu district there had been a general failure of rain. In Jaffna, as I have remarked, there was good rain in some places and scarcely any in others."

The cyclonic visitation in 1884 cost the Government Rs110,000 in making good the damage apart from the prison labour. The Government Agent was able to report well of the tobacco crop last year, also of the palmyra fruit crop, while the paddy outturn was estimated as follows for the different divisions:—

Jaffna.....	900,000 bushels
Mannar.....	270,000 „
Mullaivittu....	85,000 „
Vavuniya Vilankulam	105,000 „
<hr/>	
	1,360,000 „

To which have to be added 30,000 bushels veraku (a poor crop) and 275,000 bushels other dry grains ; but the people imported to supplement this (in exchange for their tobacco, palmyra timber, &c.) over a million bushels paddy, rice and other grain coastwise, from Batticaloa and from India, apart from what may have been carted of paddy from Anuradhapura. In addition the coconut trees bore well ; the supply of fish for local consumption was abundant (including a large number of turtle), a good many cattle were slaughtered in Jaffna town, and no doubt many sheep and poultry. It may be fairly inferred, therefore, that the people of the North know how to take care of themselves in their food supply. They could, no doubt, grow all the grain required, did not tobacco pay them so much better, but the labour involved is very considerable. Three-fourths of the crop are shipped beyond sea to India, and only one-fourth is sent "coastwise"

to Colombo, &c. The figures for total export are as follows :—

	ewt.	value
1888.....	75,847	R1,877,951
1889.....	71,251	R1,581,458

There are those who challenge us to say why this industry should remain untaxed, while grain has its special burden. The answer, of course, is that the cultivators of tobacco as of any other product in the island must pay their equal share of the grain duties according to consumption, and secondly that should tobacco culture spread and receive attention from Europeans after a permanent fashion, it will no doubt become an object of special "excise" attention. But to weigh such an industry in its infancy would be very shortsighted.—Every year sees a certain number of bears and cheetahs killed in the Northern Province, the number in 1889 being 41 of the former and 23 of the latter. The export of elephants was 45 valued at R45,000, one-tenth of which was paid as royalty. I see that the Government Agent fully acknowledges where the elephants were caught —

"The elephants were captured in the Mannar district of the Northern Province, Trincomalee and Batticaloa districts of the Eastern Province, Badulla district of the Province of Uva, and Puttalam district of the North-Western Province, and brought to Mannar for exportation."

There is a considerable foreign trade in cattle, sheep and goats, but the import of the first (3,796 in 1889) is nearly balanced by the export (2,445 head), while against 13,764 sheep and goats introduced, there were only 6 sent away. Roads, bridges, causeways and reclamation works have hitherto—rather than irrigation schemes—claimed chief atten

tion in the Northern Province; and although an immense deal has been done, yet that there is room for heavy expenditure still may be judged from the fact that Mr. Twynam sketches out how a total of nearly R300,000 can be spent on roads, besides R200,000 in replacing dangerous wooden, by iron, bridges! How much of this might be saved if Railway Extension were promptly carried out, it must be interesting to know. There is, however, no lack of irrigation works proposed, the whole involving over two millions of rupees including Mr. Parker's "Giant Tank" scheme and the "Karachehi" scheme - Karachehi or Karatschy being the first division of the Wannai south of the peninsula—each of which may cost a million of rupees. Mr. Twynam made the following remarks on these schemes in 1886:—

"The Karachehi scheme has been fully reported on and estimated for by Mr. Parker. The discovery of a dam since across the Nottah-aru, which I believe to be a part of the ancient scheme for irrigating the Karachehi, may, after its inspection by Mr. Parker, lead to a modification of his scheme, and thus admit of his reducing the cost, which is the chief objection to his scheme being carried out. There is better material available for the construction of a dam near the site of the old than is to be found near the site of the proposed dam

"The restoration of Giant's tank, or at least of the channels by which it was intended to bring the waters of the Aruvi-aru into the Giant's tank, is a work that should in any case, I believe, be taken up if the Paumben channel scheme is carried out.

"The soil of the district of Mannar is good. It is well suited for paddy, palmirabs, coconuts, fruit trees, dry grain, tobacco, and vegetables. All that is required is a regular supply of water for irrigation during the south-west monsoon months, and occasionally durin

the north-east monsoon months when the rains fail. There are in the district extensive grazing grounds for cattle, goats, and sheep. If the Paumben channel scheme be carried out a market will no doubt be opened for the sale of produce of all sorts from the Mannar district, which could be carried across to Paumben in small native craft at comparatively small cost and in a few hours, all the year round."

But, although the Paumben Channel scheme is not likely to be realized, the tank restoration should not be lost sight of—only should not the Railway come first? Mr. Twynam is very discriminating in his judgment of irrigation proposals for the outlying districts, condemning some freely, while approving others. He reports favourably of the improved health and progress of the people in the Wannai districts, and that the terrible parangi disease is gradually disappearing. He adds that the cultivation of tobacco has very much increased in the Wannai and Mannar districts during the past few years.

Of the Vavuniya Vilankulam and Mullaitivu district, Mr. J. P. Lewis gives interesting reports, and he strongly and rightly urges that easier terms for the acquisition of Crown land in his remote part of the country should be given to cultivators willing to settle. Surely "free grants" at any rate for a term of years on condition of cultivation might be made, and Mr. Lewis thinks cotton well suited as regards climate and soil. He alludes to the frequent mutilation of cultivators by bears as a reason for increasing the rewards offered for the destruction of the latter. He thinks the cultivation of coconuts, arecas and palmyras might be much extended by the villagers if they chose; but then here is a striking para-

graph throwing a flood of light on the condition of the people under the head of "legislation required": —

"The great curse of this and the Mullaivivu district is the particular system of usury that prevails in them. The interest on paddy is generally 80 per cent per annum. People borrow money agreeing to supply paddy for it, and when they fail to supply the paddy are sued for its value, and have to pay 50 per cent over the amount borrowed, or even more. For instance, A lends R10 to B in January on B's undertaking to supply 12½ bushels of paddy the following June. B is in default, and A sues him for the value of the paddy at the market price of R1.50 a bushel, and thus recovers within eight or nine months R18.75. Where, as is often the case, there is an agreement that a penalty should be paid, the high interest recovered is still further augmented. Transactions of this kind are not exceptional—they are of frequent occurrence. Moorish traders and money-lenders absorb all the earnings of the people in this manner. Considering that the Wannī people can really not be trusted to look after their own interests, it is a question whether the aid of the law should be given to enforce such agreements, or whether more than the "legal rate" of interest should be recoverable on such transactions, though perhaps it may be quixotic to suggest that it should not."

Again, would not Railway Extension (and the consequent opening up of the country) go far to change all that? It is not pleasant to read the closing sentence of the Mullaivivu report:—

"Subject to cycles of improvement and decline—of favourable seasons and drought—at the end of a half-century the district seems to be very much what it was at the beginning, "remote, unfriendly, melancholy, low."

On the Mannar division Mr. M. S. Crawford furnishes a brief report, in which he makes out a strong case for irrigation works, and he gives a goodly list of the same requiring attention. Experiments in artesian borings are to be made at Mannar. Tobacco is extensively grown in two pattus, the price ranging from £10 to £15 per 1,000 leaves, and we have the following further interesting information :—

“ A large number of persons in Mannar island subsist mainly on the various products of the palmyrah palm, which are also exported in considerable quantities. Coconuts have been extensively planted of late years in the island and at a few places on the mainland, and appear to do well ”*

One fact brought out by Mr. Twynam in reference to the whole of the Northern Province deserves special attention, and that is the comparative freedom from serious crime: one brutal murder, two cases of infanticide and five of manslaughter comprise the whole record for 330,000 people. Compare this with the Sinhalese (and Buddhist) districts, and how great the contrast! And may not the difference in a large measure be attributed to the fact that the Tamil, unlike the Sinhalese, does not carry an open knife habitually in his waist-cloth? If so, surely the sooner steps are taken to put down the latter practice the better.

The only industry engaging European attention in the North—save in so far as the bankers look after and encourage tobacco—is that of coconut cultivation in the Pallai district. But there has been no encouragement apparently—even if there were suitable land available—to add to the plantations established some 40

* See Appendix, IV.

years ago, the original owners of which have nearly all parted with their properties, making, it is feared, far more of loss than profit. In 1856 Sir Henry Ward spoke of 10,000 acres having been planted with the coconut palm in the southern division of the peninsula at an expenditure of £200,000 of European capital, and gave this as a reason for road extension thither at a time that Mr. Dyke was rather a drag on that particular project. The names of Davidson, Blundell, Gordon, Dunlop, Young were familiar in those days: to them succeeded two practical planters prominent over their fellows in Messrs. David Todd and J. G. Geddes; and while these, alas, have also passed away, it is satisfactory to find their sons as successors actively engaged on the coconut plantations in the present day, as also Mr. W. M. S. Twynam, Messrs. Patterson and others. As already intimated, the past season has been a most trying one in prolonged drought, and many coconut palms even on well-cared-for plantations have perished; but with refreshing rains once more, and encouraging prices for copra and oil, a new face may be put on the industry, and steady labour and good management on the part of the successors of the good and true men gone before, meet with their due reward. But here we are at Point Pedro waiting for the "Lady Gordon": I am reminded, after a practical fashion, of the want of telegraphic communication, shortly to be supplied, I trust, for surely all steamer calling ports and magistracies should be united by wire with head-quarters and the expense of connecting Point Pedro, Valuvettitturai and Kangesanturai with Jaffna by telegraph must be slight. Point Pedro has a local trade now very different from that which marked the year when Capt. Donnan made his first

voyage round the island in the S. S. "Pearl." He landed at Point Pedro to see his agent, then one of the worthy coconut planters named in our first batch, who, taking him into his office, pointed out a Government order for the payment to J— G— Esq. of the sum of *sevenpence-halfpenny* sterling, framed and hung above his desk. "That," he said impressively, "was my commission last year as agent for your steamer"! Not much to get fat on there; but the agent as well as the worthy commander enjoyed the little joke. Let us hope that Mrs. Levi Strong and her nephew will be enabled to make so much business for the "Lady Gordon" as to ensure a very different result. About midnight *our* commander turned up, with ample explanations of the delay at Kangesanturai, and our party, bidding goodbye to kind friends, were only thankful to be able to get off in a comparatively smooth sea, after learning how different was the experience when the Lieut.-Governor and suite made the same trip and the rough sea put out the fire of the steam launch and left them helpless for a time facing a very exposed coast. Fortunately, fires were relit, steam renewed and the steamer made in safety. In our case we were all glad to retire after our extremely interesting but hard day's work—travelling and sight-seeing in the Jaffna districts—not the least pleased being Major—— with what was to him a specially novel and pleasant experience.

FROM POINT PEDRO TO TRINCOMALEE.

Before leaving the neighbourhood of Rameswaram and the "Snake Channel," it may be well to refer to the decision arrived at by sagacious Capt. James Steuart, after examining and surveying—in succes-

sion to the lamented Capt. Dawson, R.E.,—for a ship channel which it was proposed to open alongside of or through Mannar, some sixty years ago. I suppose that Capt. Steuart would still offer the same objections to a cutting through Rameswaram island. He wrote :—

“ In the early part of 1829 Sir Edward Barnes directed Captain Dawson, the Commanding Officer of the Royal Engineers, and the Master Attendant of Colombo, to inspect the several scours or channels, in the ridge called Adam's Bridge, which obstructs the passage of large vessels between the Gulf of Mannar and the Bay of Bengal ; particularly to report on the channels within Manaar and that at Paumben ; and to suggest the best means of affecting a navigable means of communication between the two seas. In the course of this service, from exposure to the sun, and the noxious exhalations from the stagnant waters in the old stopped-up channels at Manaar, Captain Dawson contracted a disease which deprived the service of a most excellent officer, to whose memory a monument is erected on Kadugannuwa Pass. In consequence of the decease of this distinguished Royal Engineer, the drawing up of the report on the survey of Manaar devolved on the Master Attendant, who, being aware of the impossibility of keeping the mouths of rivers or channels on sandy, tideless sea-coasts sufficiently open for the navigation of shipping, was clearly of opinion that the only channel capable of improvement was that at Paumben on account of the comparative shelter it received from the adjacent isles ; but that it would not be practicable even to improve that channel further than to deepen it sufficiently to admit of the safe passage of such vessels as were used in the coasting trade of Ceylon and the Presidency of Madras.”

And later on, more particularly with reference to a cutting through Mannar island, it was stated :—

"During the administration of Sir Robert Wilmot Horton, an Assistant Civil Engineer proposed to excavate a navigable channel for shipping through the island of Manaar, at the cost of £20,000; the scheme had been submitted by the local Government to the Secretary of State, and thence through the Admiralty to its Hydrographer. This officer, whose duty embraces that of collecting marine surveys, recommended that, before so large a sum as £20,000 should be granted for a purpose so uncertain in its results, a preliminary survey should be made of the coast of Mannar, and of the approaches to the proposed channel. Accordingly, the East India Company was requested to direct the surveying branch of its navy to perform the work thus recommended, and in September 1837 a surveying schooner arrived from the Chagos Archipelago, and commenced the survey. * * *

"At the time the extraordinary proposition to cut a navigable channel for shipping through the island of Manaar was submitted to the Government of Ceylon, it had in its possession, including the original survey by the Dutch, not less than three surveys of Manaar; and that made in 1829, by the Commanding Officer of the Royal Engineers and Master Attendant was accompanied by the opinion of the latter officer that it is not practicable to keep channels navigable for shipping through sandy barriers exposed to the action of the waves on tideless sea-coasts."

At the same time the old Master Attendant was not infallible, for it seems he would have pronounced against a breakwater at Colombo, to judge by the illustration he afforded in a farther passage on the above subject:—

"It is said that as engineers have succeeded in their improvements on the tideless shores of the Mediterranean, there can be no reason why they should fail on the tideless coast of Ceylon; but the

two places are not similar. In still water, or in the absence of shifting sand, science and art may succeed, and even on sandy shores, the natural working of the elements may to some extent be assisted; but it is different with artificial stone-works on a tideless sea-coast, where the waves are continually breaking on sandy beaches which extend, and recede according to the prevailing wind or monsoon.

"In such places the erection of stone piers or breakwaters is likely to do more harm than good. At any rate such expensive works should not be commenced by any engineer who has not passed several monsoons in watching their effect and that of the action of the waves on the shifting sands on which they break.

"In 1824 a stone pier was extended from the Colombo Custom-house to facilitate the landing and shipping of merchandise. As this work extended, so did the sandy shore of the cove within it, until the place where the cargo boats used to be moored became dry sand, and a temporary wooden jetty had to be extended into the sea. On the said pier being removed the sea gradually resumed its former boundary, and restored the cove which affords shelter to the cargo boats."

The very fact, however, of so much success in the grand artificial harbour at Colombo, diminishes the necessity for spending money in canal or breakwater at the North of the island, the Paumben Channel sufficing for all that is needful.

Leaving Point Pedro in the early hours, the "Lady Gordon" speedily ran down the North-East coast, and in the forenoon we were off Mullaittivu, and looking at the spot where the P. & O. S. S. "Indus" came to grief

in November 1885, her masts, if not yards, being still visible. Thence the glimpses of the coast were few and far between till we arrived at the neighbourhood of Trincomalee. I suppose the North-East shore between these two stations is at present about the most man- if not God-forsaken portion of the island, and yet it is not without attractions and resources if only there were readier means of communication and population sufficient and sufficiently energetic, to take advantage of what is available. It is a most striking fact that some of these advantages, which fail to attract the attention of the Tamils of the North and East, are sufficient to draw away from our distant South-Western and Southern coasts, a people usually considered so much less enterprising than the Tamils, namely the Sinhalese! What have our friends who are inclined to speak of the Tamils as "the Scotchmen of the East" to say to the fact that all the most important fishing along the East coast—the deep sea fisheries entirely—are in the hands of Sinhalese?

I first fully realized this strange circumstance at Batticaloa where I was assured that the Tamil fishermen never ventured outside their extensive lagoon ("muddy lake") after fish, and the sea-fishing was solely in the hands of Sinhalese from the Southern Province, who had even formed settlements at certain points on the coast in pursuit of this industry. Still more striking is it to find the Negombo (Sinhalese) fishermen coming round as far as Mullaittivu, for here are two paragraphs from the Diary of Mr. J. P. Lewis, attached to his Administration Report for last year:—

There are three sets of Sinhalese fishermen between Chundikulam and Nallatannitodavai encamped on the

sea-shore, each using a large Indian "vallam" with outriggers instead of the usual Sinhalese boat (oruwa or kulla.) Asked the reason of their not using the latter, they said the boats would get broken in landing.

"It is enterprising of the Negombo fishermen to come to this coast to fish, while the natives of the place make no attempt at it. Of this the absence of boats along this coast is a melancholy sign. These fishermen also sell rice, &c., to the natives, and at Salai and other places on the coast they have bought land and made coconut plantations, some of which are flourishing. They do not remain here, however, during the "winter" months."

It would be a striking reversal of expectations if the opening-up of the North and East by Railway communication should lead to an extension of Sinhalese, rather than of Tamil, settlement. There is, however, plenty of scope for both in the widely unoccupied districts and coasts of the North and East. Seen from a steamer's deck there is certainly nothing attractive in the appearance of the Eastern part of Ceylon. Even when the hills of the interior become visible, they are dwarfed by distance, while the coast lies low covered generally with chena or scrub.

TRINCOMALEE.

The first sight, too, of Trincomalee is disappointing. Notwithstanding that Fort Frederick stands boldly up like an eyrie or watch-tower over the entrance to a mysterious country, there is nothing to arrest attention in the soft-looking laterite rocks or broken hillsides, and certainly no promise from the outside of what awaits the voyager seeking the harbour within. You have a feeling that there is deep enclosed water beyond this fortified hill which like a sentinel

doth stand to guard what may be an enchanted land; but, as in the case of the approach to Sydney, New South Wales, or San Francisco from the Pacific, there is little indication of the grandeur and beauty "within the gates." Sunset poured its yellow flood on Fort Frederick as the signal flags for the "Lady Gordon" were hoisted and left flying; but ere we had passed the entrance leaving Foul Point lighthouse in its solitary state, far to the south, sunshine was exchanged for the unusual sight over Trincomalee in August of a succession of dark clouds breaking into most welcome showers. The good fortune which attended us at Jaffna was continued, but on this occasion our party gave the credit of bringing rain to the dry East to Bishop Melizan, who was on his first official visit to his flock in the Trincomalee and Batticaloa districts, and who with the intelligent chief Mudaliyar of the Eastern Province formed exceedingly pleasant *compagnons de voyage* from Jaffna to our mutual destination, Batticaloa, making up for the loss of the Major at Trincomalee. Meantime the "Lady Gordon" is rapidly running into harbour, and the passengers on deck have more than enough to absorb them; for each fresh turn—indeed every few yards onwards reveal fresh beauties and a new surprise. We find words vain to describe how the disappointment of the previous half-hour is turned into the fullest gratification. The grand Australian and Californian harbours as well as that of New York have all the effect of magnificent cities to back them. The Derwent at Hobart and the Bay of Naples are very fine in their way, but I can only think, for comparison, of Nagasaki, the first port in Japan which you approach as if you sailed up to

Kandy by the Peradeniya strath. But for varied and extensive natural beauty, Trincomalee will ever stand first in my estimation. Well does Tennent speak of "The magnificent basin of Trincomalee which, in extent, security and beauty is unsurpassed by any haven in the world." On rounding Fort Frederick and standing well in for the harbour, Kottiyar with its populous and industrious Tamil village comes into view across a wide expanse of water, fully exposed, however, to the north-east monsoon. Visions of Robert Knox and his father and their melancholy experience of over 200 years ago are recalled. But our little steamer is following a winding course rounding points and threading between islands all more or less clad in tropical verdure to the water's edge. until we find ourselves, as the afternoon closes in, in a splendid basin of water, not simply shut off from the currents and storms of the ocean, but doubly landlocked, the entrance from the sea being completely hidden from sight and only islands and bays and jetties being visible. Meantime, the sight of Fort Osterburg, the Naval Yard and Admiralty House and grounds, all in succession, and bounded by deep water to the very shore, reminds us—even without the presence of a single man-of-war—that we are in the great Naval station of the East, the headquarters of the Indian Fleet which watches our British interests from Calcutta to Capetown and from Singapore to Aden and Zanzibar. What was wanting to complete the scene? Even amidst so much natural beauty and with so many vantage points within ken, how could we help missing the villas, the embowered bungalows and gardens running down to the boat-houses at the water's edge, which would have marked each hillside and island, and would have

formed a fitting frame or fringe all round this romantic but admirable sheet of water, had it only been ordained that Trincomalee should become the commercial and political capital of Ceylon! We cannot think of the place henceforward without a feeling of regret that one or other of the many projects of 40 and 50 years ago for running a railway inland from Trincomalee (along the bunds of ruined tanks as Mr. Wm. Morris in his pamphlet to Lord Torrington had it) did not take effect. I am well acquainted with the many objections to a transfer of trade and Government, in respect of lack of population, trying climate, &c.—(poor coffee having so fallen, the obstacle about a drying season and abundant store hands disappears!)—but even if simultaneously the railway had been extended to Colombo, the grand Eastern port would certainly have divided the foreign trade arising from the planting enterprise, while a grand breakwater at Colombo would scarcely have been proposed much less carried out. Indeed, it is interesting to recall the fact that about the year 1853, the P. & O. Company directors seriously entertained the thought of transferring their Ceylon agency to Trincomalee and allowing the Colonial Government to carry their mails (and the passengers) as best they could across the island. It was then that the project of a railway found most favour, and as usual Capt. James Stuart was well to the front. He strongly favoured a railway between Colombo and Trincomalee (rather than between Colombo and Kandy) for political as well as general reasons; but he as stoutly opposed the idea that Trincomalee could supersede Colombo as the commercial capital. Here is what the veteran wrote in opposition to the proposal laid by the P. & O.

Company before the Lords of the Admiralty :—

“It would, however, be as well to remind those persons who desire that Trincomalee should become the coaling station of the want of anchorage ground off the entrance and within the great bay of that port; also of the strong southerly current which sets past it in the N.-E. monsoon—all of which are grave objections to that harbour as a resort for colliers and other sailing vessels; and further that commercial men should bear in mind that the wet season on the east coast of Ceylon is at that period of the year when dry weather is required for preparing the coffee for shipment, as it is now prepared and shipped in Colombo.

“It further appears that the Governor is unwilling to advocate a single line of railway to Trincomalee, as suggested in my report to the late Sir George Anderson in 1854, and that the Admiralty discourage my suggestion in that report, that the steam-packets should call off Colombo for the purpose of embarking and disembarking mails and passengers on the grounds that the anchorage at Colombo is open, and in the S.-W. monsoon both inconvenient and dangerous: that the steamers, owing to their large draught of water, would be compelled to lie a mile and a half off shore, and that boats would be obliged to pass a turbulent bar in landing mails and passengers.

“With respect to the Governor’s disinclination to advocate a single line of railway to Trincomalee, I can only say that His Excellency should be a better judge respecting the *political* and commercial advantages of such a means of communication, and the purely commercial advantages of a line from Colombo to Kandy. But after thirty years’ residence as Master Attendant at Colombo, and experience previously gained in command of merchant ships trading to Ceylon, I feel that I should not refrain from expressing my professional opinion on the anchorage of that port, and on the facilities afforded for the embarkation and disembarkation of mails and passengers from steam-packets calling

there for the purpose. * * * * * When I suggested that the steam-packets should call off Colombo, I contemplated building boats of safe construction for the purpose; and if I had been aware of the objections entertained by the Admiralty, I should have suggested to the Governor of Ceylon that rather than have to convey the mails to and from Trincomalee without a single line of railway, it would be well to moor a vessel to receive the mails off Colombo at sufficient distance for the mail-packets to keep under their weigh during their transmission from one vessel to another. This would be attended with some expense, but only for the short time necessary to give confidence to the officers of the steam-packets; who, on seeing the facility with which the boats proceeded direct to the shore with the mails and passengers, instead of depositing them on board the vessels moored for the purpose of receiving them would soon become convinced that such vessel could be dispensed with.

“Since the 97th Regiments were (in opposition to the wishes of the Governor) landed at Trincomalee in 1825 from the Hon’ble East India Co.’s ships that had brought them from England and were subsequently subjected to a tedious passage of many weeks against the S. W. monsoon, on their way to Colombo in ships hired by the local Government for the purpose, all troops except those employed to garrison Trincomalee have been disembarked at Colombo at all seasons, and that, so far as my memory serves me, without the least delay through stress of weather.”

Nevertheless so earnest was the author of the “Notes on Ceylon” in his advocacy of a Colombo-Trincomalee railway that he urged a local loan for the purpose detailing, among others, the following advantages:—

“When the debentures which had been issued to defray the expenses of the Kandyan War of 1818 were

paid off, the Governor of Ceylon was forbidden to contract any further debt; but for the purpose of assisting the revenue in the completion of a *single line* of rail across the island for the conveyance of the English mails, such restrictions on His Excellency might probably be withdrawn. Such a public debt would afford the means of secure investment of trust money and of the funds belonging to widows and orphans, as well as those for the support of the aged and the helpless. Ceylon has no such secure means of investment; and as no portion of the people are more entitled to the protection of the Government than those who are unable to protect themselves, the sooner it is provided with such means, the nearer will its rulers be to the fulfilment of their duty."

Captain Steuart never relaxed his opposition to the Kandy line which he lived long enough to see commenced, and in the latest edition of his little book published in 1864 he sarcastically drew attention to the fact that the Ceylon Government paid *six per cent* on their railway loan of the exact amount of the bank notes in circulation on which they only received *one per cent*. The lifelong opponent of Bank rather than Treasury notes would have been gratified had he lived to see the Ceylon Government Currency Notes inaugurated in 1885; but, returning to Trincomalee, if the shades of our departed friend revisit the glimpses of the moon, he will still have to deplore the fact that though geographically connected with the island and garrisoned in correspondence with the rest of the colony, the great Naval station may be said to stand apart in her solitary grandeur—in her adornments, as has been said, of marine and sylvan beauty,—

Like lady of the mere
Lone sitting by the shores of old romance.

And yet we may be on the eve of a new era for

Trincomalee, hitherto in so many respects like Mr. Lewis's "Mullaittivu";—"remote, unfriended, melancholy, slow." The considerable addition to the garrison for which provision in barrack accommodation is being made is sure to increase its importance and make movements to and fro more frequent, for which better means of locomotion are already to some extent provided. For, apart from the convenient and regular visits of the "Lady Gordon," the coach service to Dambulla and Matale is so well-maintained as to make the Eastern port much more accessible, and with the possibility of a railway within a reasonable date at least as far, in the way, as Dambulla, we may yet see a full despatch of visitors by rail and coach from Colombo to Trincomalee (or why not by special charter of her ladyship steamer?) to take part in the holiday week of sports and more especially the series of regattas for which no finer sheet of water probably exists on the surface of the globe. Even now after seeing both Trincomalee and Batticaloa, and the district connected with the latter, I cannot help feeling that the day should not be far distant when the chief seat of provincial administration ought to be restored to the former. The temporary necessity which made the change southwards, no longer exists, and with the construction of a good carriage road—now in course of completion—between the two towns, open at all seasons, there will be less reason than ever to keep the chief civil officer away from what is so manifestly and rightly the capital of the province. There will be probably in the future more room for public works of improvement and amelioration generally in the northern than in the southern half of the Eastern Province, highly favoured comparatively as the latter division has been and still is by Government.

But I have run away from the inner harbour of Trincomalee before the "Lady Gordon" has cast anchor in front of a jetty (which doubtless if it were worth while she might have run alongside) and before a line of Customs offices and warehouses presenting a great contrast in their still blankness to those left behind at the Western capital. Kind friends were ready to receive us, through whose good offices, notwithstanding our late afternoon arrival, we were able to enjoy a drive round the noble esplanade and to mark the situation of the "Pettah," Back Bay, the Fort occupied by the garrison, the coast line and broken hilly country running close up to the town, enabling one to understand how in seasons of drought, denizens of the jungle (deer, cheetahs, perhaps bears and elephants) have been known to come in round about the town. At any rate, the officers at Trincomalee should not have far to travel for sport, to some extent at Trincomalee, while they are surrounded by a variety of romantic prospects—striking, beautiful, sublime—far excelling those appertaining to any other station in Ceylon.

Next morning (Sunday) from Mr. Nevill's hospitable residence—once the Messhouse of the Ceylon Rifle Officers, and built on one of the most commanding sites overlooking the harbour, I had the pleasure of watching a tropic sun light up headlands and bays—water, land and vegetation—in all its splendour. Later on as we drove to service and especially in returning from the Garrison church, we began to think of the proverbial heat of the locality supposed to have only a thin division between it and a certain subterranean region—of Sir Hardinge Giffard's humorous lines commencing,—

"What ho!" cried the devil, "go rig out my bark
Built of the cypress tree,"—

And of the hasty period put to his satanic majesty's visit through the considerable heat which made him

In haste to quit such a roasting place !

The Chief Justice of 1820-28 was pleased to be satirical at the expense of Trincomalee, just as his brother officer Henry Matthews—who was Queen's Advocate from 1823 to 1830—(succeeding Giffard who held that post from 1811 and followed by W. Norris, 1830 to 1834 before he became Judge) —exercised his literary gift in another direction. I mention these names suggested through the rhyming reference, to recall the curious fact that the present British Ministry should have two members so closely connected with Ceylon in the Lord Chancellor Halsbury, son of our old Chief Justice Giffard, and the Home Secretary, son of Advocate Henry Matthews, while Sir Wm. Norris is still represented amongst us by the consort of our present Governor.—But I must go back to mention our visit to the headquarters of the Wesleyan Mission, meeting Mr. Knapp (whose good service in Trincomalee I have already hinted at) and the "Methodist" Bishop for the North and East, the Rev. E. Rigg, who was on his farewell tour through the Batticaloa and Trincomalee districts and preaching that very day special Missionary sermons in the neat and commodious Trincomalee chapel. Mr. Rigg, who has proved a devoted missionary and has so wisely guided the Tamil Mission since Dr. Kilner's retirement, returns to England in a few weeks, and is to be succeeded as "Chairman" or "Bishop" of the district by the Rev. G. J. Trimmer. We also attended the Garrison church inside the Fort, and heard prayers read by a gallant military officer whose clear forcible tones seemed to falter a little dubiously (it may have been imagination on my part) in giving out the petition,.

“ Give us peace in our time O Lord,” reminding me of the story of the young Christian officer attending a Missionary Conference at Jaffna (when there was a garrison at that station) and who could not help audibly commenting on a prayer to hasten the time when war should be no more, with a “ God forbid ” (in place of the usual “ Amen ”) explaining by the query, what was to become of his profession or the chances of promotion ?! The garrison at Trincomalee must number, at present, I suppose, some 400 men of all arms—Artillery, Engineers, and Highlanders, besides the Naval Depôt—with some 15 or 16 officers. This force will probably be increased to close on 600 ere long ; but Trincomalee has seen more stirring times in its day, more especially in 1801, when 5,000 British troops assembled here under the command of Col. Wellesley (afterwards the world-renowned Wellington) intended at first for the reduction of Batavia (Java), though the Kandyan King was led by an Adigar to believe they were to invade his country—but who subsequently went under Sir David Baird to Egypt, while Col. Wellesley went back for the time to India. Percival gives a vivid account of the taking of Trincomalee by the British in 1795 when General Stewart had with him the 72nd and 77th Regiments with the flank companies of the 71st and 73rd, 2 battalions Sepoys and Artillery and Pioneers. In entering the harbour, one frigate striking on a sunken rock was lost. After a three weeks’ siege, a breach being effected, the garrison surrendered, the only spirited opposition being a sally of Malays. Frightful mortality has at times prevailed among troops at Trincomalee, the 80th in 1797 and the 19th Regiment in 1804 especially suffering. The Portuguese ruthlessly

destroyed the famous ocal temple of 1,000 columns and with the materials fortified Trincomalee in, 1622, but only to be taken by the Dutch 17 years later and soon after the whole island renounced the rule of the "Portugal Kings" who had said they would "rather lose all India than imperil Ceylon." At the close of the great European War in 1815, Trincomalee was garrisoned by the 67th regiment, and as great military reductions were the order of the day, grants of land in Canada with pensions were accepted by many of the officers of this Regiment. Driving to the caves of Luray in Western Virginia in 1884, great was my surprise to be accosted by one of the party—a typical Yankee doctor—with the statement that he was born "at Trincomalee"—a son of a Capt. in the 67th. Again on my first and only visit to St. George's Hall, Liverpool, in company with a Ceylon planter, it came out incidentally that the guardian of the hall had spent some dozen years (as Sejeant R. A.) at Trincomalee ! Small incidents these which crop up under the name of the station. That name is said by Casie Chetty, I think, to be as old as 1589 B.C., and to be properly Tirukkonathamalai—"mountain of sacred Konathar"—in whose honour doubtless the temple near the Samy rock was erected.

TRINCOMALEE DISTRICT OF THE EASTERN PROVINCE.

I have said nothing as yet of the Trincomalee *district* as contrasted with the town, and yet although the Naval and Military station and grand harbour are alone thought of when "Trincomalee" is mentioned, yet the "Hinterland"—to copy the popular term of the day—is not to be

despised. The revenue district covers over 1,000 square miles—twice the size of the Matara district for instance,—although only occupied by some 14,000 people, apart from the 12,000 counted in the town and suburbs. It is the lack of population that must be the chief drawback to agricultural progress, for there are many resources worthy of development and the progress made in certain directions of recent years is very encouraging. In this connection the Kantalay tank can by no means be deemed a failure, nor the money spent on its restoration be considered thrown away. It may be a matter of interest, that the tank makes the resthouse of the same name, one of the most attractive in the island from the quiet beauty of the lake-like expanse in front of it ; but it is of more importance to learn from Mr. Nevill that cultivation under the influence of Kantalay tank is steadily expanding, and that the people of Tambalagam are becoming fully alive to the advantages offered to them in irrigable land to extend the area under old, and introduce new products. I have the latest Administration Report on the district before me; and as one evidence of advancement it is shown that the revenue, due to local prosperity, has increased over 30 per cent. within the past six years, fully justifying Mr. Nevill's call for a "liberal expenditure on small irrigation works and improved land communication between Trincomalee and Kottiyar Pattu." It is certainly not very creditable that the Pattu which seems to be the most important seat of rural advancement should be so cut off from the capital of the district as that communication by cart is described as impracticable. In connection with the very wise determination to open a good cart

road, practicable at all seasons, between Batticaloa and Trincomalee, I have no doubt the Kottiyar section will have justice done to it. After seeing Trincomalee harbour, experiencing a very little of the difficulties connected with Batticaloa Bar, and travelling along the road to Badulla, it has struck me,—to forestall a little—that Sir Hercules Robinson was perhaps wrong in not carrying his grand eastern road from Lunugala across country to the shores of the magnificent natural harbour. No doubt it would have been longer and more expensive, but how great the terminal advantages !*—Kottiyar Pattu must have been the scene of very extensive cultivation in the early Dutch times, but it fell into decay however before their rule was over. I judge by the following extract from “Tennent” :—

In 1612, the Dutch, by the treaty negotiated by Boschouwer, obtained permission from the Emperor of Kandy to erect a fort at Kottiar, “provided the King of Cottiarum may enjoy his customs and other revenues;” and in 1675, they had constantly from eighty to one hundred ships, bringing cloths and other wares from Coromandel; to be bartered for areca-nuts, palmyra sugar, and timber. The country surrounding it was full of villages; rich in arable and pasture lands; producing large quantities of rice for exportation, and importing merchandise annually to the value of one hundred thousand pagodas. But within less than a century, the whole aspect of the place was changed; the Dutch abandoned their fort; trade deserted the harbour; the town fell to ruin, and the Governor of Trincomalee, writing in 1786 (the Dutch having resumed possession of the district about twenty years before), described the reion as

* See *Appendix*, V.

an uncultivated solitude, and the people as savages, "with hardly anything of human nature, but its outward form;"—and strongly recommended—that an effort should be made to colonise Kottiar with labourers from China or Java."

The ruin and abandonment were no doubt due to the constant incursions of the Kandyans. We may feel some satisfaction that under British auspices there has been a great improvement in the condition of the people and district as described a hundred years ago, and if the required cart road is opened up and encouragement given—which means perhaps a little "moral suasion"—to get the cultivation of fruits and vegetables, cassava and Indian corn taken up, as well as the paddy and tobacco now claiming attention, there will be less need for importing such necessary products and a good deal more money from the town and harbour will be circulated in the district. Mr. Nevill also rightly attaches importance to good road communication northwards with Mullattivu as the best means of opening up the rice lands of the coast villages and giving the people an impetus to increased industry by providing a ready means of reaching a good market. He specifies a number of irrigation works—none of them very grand or costly—as worthy of attention; and while he shows that tobacco cultivation is extending, he thinks there is much land suited for cotton growing and accordingly the villagers are being stimulated to take up this product. The pastures of the district are found to be of increasing importance to the butchers who supply the Kandy district, and there is also an increasing cartage of fish (salted) inland while Customs figures given show a considerable and advancing export trade in this article. Perhaps all this justifies the revenue officer in even giving

a heading to "The Railway" in his Report ; but it is on imperial grounds he looks for such extension, although the immediate necessity is indicated by better roads, while a locomotive line as far as Dambulla (on the way to the North) could not fail to be beneficial. Mr. Nevill has an interesting paragraph in reference to the Tambalagam pearl oysters which I copy in full:—

"The fishery in Tamblegam Bay of the *placuna nomia** pearl oysters has failed, and the renter is a heavy loser. The last renter fished such very immature oysters that he ruined the chances of the present renter. I advise that a proviso as to size of oysters to be fished be inserted in all future leases. Pearl oysters of the variety yielding the best pearls, are known to be found along this coast. Shell dealers, brought me some dozens or more well grown specimens, alive, found by wading in the harbour at low water. As a conchologist, there seems to me no reason why commercially valuable pearl banks should not exist here, and I think we may accept it as certain that a considerable revenue is to be obtained on this coast from pearl oysters. If Government does not care to take up the matter, a liberal concession for a reasonable time, not a reward of Rs500 as offered at Batticaloa, would probably induce a syndicate to thoroughly investigate the matter. A royalty could be recovered if its efforts were successful."

The hot springs in the neighbourhood of Trincomalee and similar evidences of a connection with the far eastern volcanic system, showing up at various points in the Batticaloa district are of much interest. There is no reason to doubt that if made easily accessible, these waters (at Cannea more especially) would be found beneficial to many sufferers in the island and perhaps India and

* Hitherto known as *Placuna placenta*.

the Straits. I do not expect that they would prove as potent as the thighbone of the saint immortalized in the "Ingoldsby Legends" of whom we are told, that,—

—Oripples on touching his fractured *os femoris*,

Threw down their crutches and danced a quadrille.

But seeing how much is made of hot springs in Europe, there is no reason to doubt the value of those in our Eastern Province. Returning to the harbour, I could not help regarding it as a melancholy fact* that the "Lady Gordon" was the only vessel within its wide expanse. Mr. Geo. Robertson, the Indian Harbour Engineer, had a similar experience; for he wound up his report of 1873 (on Paumben &c) by mentioning:—

"At Trincomalee I made an examination of the magnificent harbour in the steam launch along with Captain Varian and Captain Dinnan. It was melancholy to see the finest harbour in India, beyond all comparison, with only one brig in it, and one steamer the "Atlanta" under repair."

By way of contrast and to show the imperial value of the place I may quote what Mr. Nevill gives as an experience last year:—

"On Dec. 22nd Admiral the Hon. E R Fremantle, R.C.B., arrived, and H. M. ships 'Boadicea,' 'Griffin,' 'Conquest,' and 'Garnet' in the following days successively coaled here, and started for Zanzibar. The rapidity with which they were collected, coaled, provisioned, and despatched has caused general surprise, and must go far to emphasise the importance of Trincomalee as a naval centre."

No doubt the Admiral and some portion of his fleet will shortly once again return to headquarters at Trincomalee, and if it be true that the long-talked of dock, as well as a new pier and better water supply, are to be undertaken by the Admiralty authorities next

year, a very lively and prosperous season may be anticipated at the Eastern Port, and Colombo may after all be beaten in the race after a dock. But no certain order has yet gone forth.

While at Trincomalee there came incidentally under my notice more than one illustration of the "free and easy" way in which the Government are accustomed to send junior—and sometimes senior—civil servants all over the country at short notice perhaps, and with very little consideration as to the convenience of the recipients of orders. Not a word of complaint did I hear, and for aught I know the transfers may—as promotions—have been regarded as satisfactory. But while it may be pleasant enough to go travelling round and across the island once in a way, it must be acknowledged by every other class in the island—commercial and planting especially—that it is often far from comfortable to be ordered off at short notice from the Western to the Eastern, or the Southern to the Northern Province—to find, after settling down to revenue or judicial work at a quiet country station, necessarily "setting up house" which means getting furniture, servants &c., that scarcely have you become acquainted with your Kachcheri or Customs duties, or with your Court and people, than you are ordered off to the other end of the island, to take up an entirely different set of duties, involving the disposal as best you can of your recently-purchased "furnishing," and the provision of fresh arrangements and servants as best you can in the new and strange station! While I was at Trincomalee, one young civilian started off for Mullaittivu to "act"—I see he has since been gazetted to go to the far south-west, while his successor who came in

from the Western Province, is already talked of as a likely man to take up duties in Colombo—and all within a month or six weeks! How a firm of Colombo agents or an inspector of estates would be “blown up” if they sent their “young men” running over the country at this rate even within the circuit of the planting districts! And then every estate bungalow, as a rule, is supposed to be ready furnished with all heavy and indispensable articles of furniture at the expense of the plantation; while so far as Government care, apparently, a civilian may arrive to find his station’s bungalow, however remote, destitute of anything but the four walls.

Before closing my chapter on Trincomalee, I must give a quotation—from Tennent—touching on one or two points omitted in the foregoing observations:—

“Trincomalie, though a place of great antiquity, derived its ancient renown less from political than from religious associations. The Malabar invaders appear to have adopted it as the site of one of their most celebrated shrines; and a pagoda which stood upon the lofty cliff, now known as the ‘Saamy Rock,’ and included within the fortifications of Fort Frederick, was the resort of pilgrims from all parts of India. With this edifice, which is still spoken of as the ‘Temple of a Thousand Columns,’ is connected one of the most graceful of the Tamil legends. An oracle had declared, that over the dominions of one of the kings of the Dekkan impended a peril, which was only to be averted by the sacrifice of his infant daughter; who was, in consequence, committed to the sea in an ark of sandal wood. The child was wafted to the coast of Ceylon, and landed south of Trincomalie, at a place still known by the name of Pannoa, or the ‘smiling infant,’ where, being adopted by the king of the dis-

trict. she succeeded to his dominions. Meantime, a Hindu prince, having ascertained from the Puranas that the rock of Trincomalee was a holy fragment of the golden mountain of Meru, hurled into its present site during a conflict of the gods, repaired to Ceylon, and erected upon it a temple to Siva. The princess, hearing of his arrival, sent an army to expel him, but concluded the war by accepting him as her husband; and in order to endow the pagoda which he had built, she attached to it the vast rice-fields of Tamblegam, and formed the great tank of Kandelaj, or Gan-talawa, for the purpose of irrigating the surrounding plain. In process of time the princess died, and the king, retiring to the Saamy Rock, shut himself up in the pagoda, and was found translated into a golden lotus on the altar of Siva.* * *

"The scene of this sacrilege* is still held in the profoundest veneration by the Hindus. Once in each year, a procession, attended by crowds of devotees, who bring offerings of fruits and flowers, repairs, at sunset, to the spot where the rock projects four hundred feet above the ocean;—a series of ceremonies is performed, including the mysterious breaking of a coco-nut against the cliff; and the officiating Brahman concludes his invocation by elevating a brazen censer above his head filled with inflammable materials, the light of which, as they burn, is reflected far over the sea.

"The promontory sustains a monument of later times, with which a story of touching interest is associated. The daughter of a gentleman of rank in the civil service of Holland, was betrothed to an officer, who repudiated the engagement; and his period of foreign service having expired, he embarked for Europe. But as the ship passed the precipice, the

* The Portuguese destruction of the temple of a thousand columns.

forsaken girl flung herself from the sacred rock into the sea ; and a pillar, with an inscription now nearly obliterated, recalls the fate of this eastern Sappho, and records the date of the catastrophe. * * *
The inscription runs :—

‘TOT GEDACTENIS VAN FRANCINA VAN BREDE LUF * *
MYDEEGT DESEN A^o, 1687 24 APRIL OPGEHEGT.’

“The modern town of Trincomalee is built on the neck of a bold peninsula, which stretches between the inner and outer harbours, rising, at its southern extremity, into lofty precipices covered to their summits with luxuriant forests. It is strengthened, at the narrow entrance of the inner harbour, by the batteries of Fort Ostenburg, rising one above another for the defence of the port and arsenal. A huge rock to seaward has been surmounted by the works of Fort Frederick.”

The night was beginning to fall as the “Lady Gordon” left her anchorage in the peaceful waters of what seemed an inland lake, and as we steamed back to the sea, passing once again islands, rocky headlands and wooded acclivities, it were easy to realize how among other comparisons, the grand harbour has been described as an “Oriental Windermere.” Very soon we faced the heaving swell of the Indian Ocean and the white foam on the breaking crests of advancing waves. Foul Point Lighthouse warned us off a dangerous coast and we stood well out to sea before running southward to the second and very different port of the Eastern Province :

Know ye the light of yon huge granite tower,
How redly it gleams o’er the night mantled sea ;
A beacon to warn of the rock demon’s power—
O Pilot beware that the danger ye flee !

BATTICALOA AND THE EASTERN PROVINCE.

THE LIFE OF THE COMMANDER OF A COASTING STEAMER.

“The sea washes off all the ills of men” said the ancient philosopher ; but fond as we may be of a voyage now and then, who amongst us “land-lubbers” is not prepared to sympathize with those who have but brief intervals ashore? True we have the words of Holy Writ to remind us that “they that go down to the sea in ships—that do business in great waters : these see the works of the Lord and his wonders in the deep.” To coasting voyages, however, we would more particularly refer. The navigation of well-found steamers for long voyages whether across the Atlantic or Pacific oceans or even round the Cape of Good Hope or much-dreaded Cape Horn, has always seemed to us far less trying and risky, than the command of a coasting boat intended to call at perhaps half-a-dozen ports in as many days, some of them with exposed roadsteads or a rock-lined shore. We have certainly sympathized much with the officers of such steamers along the English and Scottish as well as Australian coasts ; but still more trying must the duty be in the tropics. We have heard British India S. N. Co.’s commanders say that they scarcely knew what it was to have a proper night’s rest between Bombay and Calcutta when their duty required a call at every coast port, and that it necessitated special care and watchfulness to make night or morning each successive little port or roadstead in safety. Not long ago a commander threw up a good post in such a coasting steamer, to begin in an inferior line, but with service between India and the old country —as far less trying to nerves and comfort. Coasting around Ceylon is probably

quite as trying as running from Bombay round to Calcutta. Indeed rather more so, considering the peculiar navigation required for the Paumben Channel and the great care needful in threading in and out among the Jaffna islands at one season and standing off and on in Palk's Bay during the other, apart from the risks of anchoring and landing at Batticaloa and Hambantota and the rocky entrance and diverse currents distinguishing Galle. Taking all things into consideration, we may feel assured, therefore, that the Commander of the S. S. "Lady Gordon" making the circuit of the island twice a month, has not by any means a sinecure, any more than had his predecessors in the old "Serendib" and "Pearl." The old lines may be parodied and applied,

Ye gentlemen of Lanka who live at home at ease,
How little do ye know the dangers of the seas !

—at any rate by anyone who has been in the tail-end of a cyclone off Kankesanturai or Point Pedro or in a gale off Batticaloa. It is indeed rather remarkable that while the coast of Ceylon is studded with so many wrecks of steamers—the "Indus," "Ava," "Leith," "Macgregor," "Brennus," "Kerbela," "Malabar," "Agra," "Arcturus," "Sikh," "Orestes," "Ascalon," "Justitia," "Norsa," "Erin," &c.—that had no special business in most cases to get near land, the island coasters of the S. S. "Pearl," "Serendib" and now the "Lady Gordon," should have run so long, covering well-nigh 40 years without disaster. This indicates great care and watchfulness. Indeed when Capt. Donnan took the command of the "Pearl," his orders were to cast anchor every night, such orders being issued irrespective of whether there was anchorage ground available or not ! To Capt. Donnan succeeded Capt. Varian, and then came poor Robson,

while now we have Capt. Whitley, as careful a Commander as could be desired.

BATTICALOA AND KALKUDA BAY.

The difficulties attending communication with Batticaloa, the capital of the Eastern Province, are certainly very real and considerable. We made the roadstead with the "Lady Gordon" in the early morning. The curiously-shaped hills—Gunner's Quoin, Friar's Hood, or Baron's Cap—had one or other been rising into prominence out of the Eastern low-country as the sun came out and we approached the coast. A dozen miles north of our destination, Capt. Whitley pointed out "Kalkuda Bay," the one hope of the district as a harbour, of which more anon. We anchored not far from the coast in a direct line, but out of sight of any town, the bar and the breakwater with a long line of lake or river fringed with coconut palms alone indicating the direction of the capital. Our visit was in one of the most favourable months of the year (the end of August) and we landed in the local "lifeboat" on a very mild morning and yet the tossing was considerable, while the way in which the cargo boats "shipped seas" as they neared and crossed "the bar," gave us a vivid idea of the risks that must be run in the stormy weather, and at all times when the north-east monsoon is blowing right on to the coast. Indeed another passenger boat, not so buoyant as our cork-lined one, although well-manned, could not pass in without a tossing and "watering" more lively probably than enjoyable. Altogether, we received a lasting impression of the unapproachableness of Batticaloa from the sea by present route for a great part of the year, of "the service of danger" which must be associated with landing or shipping here in

rough weather and of the absolute need therefore of a better means of approach either by sea or land. For the former, it is proposed, as I have said, to try Kalkuda Bay: there is a good carriage road connecting it with the town and the drive of 20 miles, or the cartage of goods for that distance will be as nothing, provided landing and shipping can be effected with facility and safety. Such is the hope and belief of the public officers who have looked into the matter. Captain Whitley did not seem to us quite so sanguine, though he is prepared to give the Bay a fair trial. At Trincomalee, we thought it a pity that Sir Hercules Robinson had not carried his great eastern outlet for Uva, across country to the finest harbour in the island. But there were great difficulties in the way connected with the Mahaweliganga, whose tortuous course and diverse tributaries and mouths may be judged from the Report we have been publishing in the *Literary Register* of Mr. Brocke's Exploration made at a time (sixty years ago) when it was hoped to make this river navigable up to the Kandyan hill-country. Sir Hercules was not, however, so shortsighted as to regard the want of a harbour at the end of his road as of no importance. On the contrary, he had set his heart on substituting Kalkuda Bay for the Batticaloa roadstead and bar landing place. And we have learned from Captain Donnan since our return to Colombo how his last instructions from Sir Hercules were with reference to this scheme. Mr. Folkard who was at the time the Public Works Officer in the Eastern Province had taken a special interest in Kalkuda, and so eager was the retiring Governor to have the substitution matured that in leaving Colombo finally, travelling with Lady Robinson in the "Serendib" (Capt. Varian) to

Galle, His Excellency took our Master Attendant with him, that he might go on in the steamer to Batticaloa and there carefully inspect and report on Kalkuda Bay. This Captain Donnan did in company with Mr. Folkard who afterwards drove him to the boundary of his district at Bibile, where Mr. Ormsby, then the Badulla P. W. D. officer happened to be and the latter again conveyed our Master Attendant to the limit of his roads at Nuwara Eliya. Captain Donnan's Report on that occasion was addressed to the Colonial Secretary, but apparently never published—at least we can find it in none of the volumes at our command. If Government will grant us permission, it will appear in our Appendix.* Meantime here is a second report from Captain Donnan which we find appended to Mr. Hume's Administration Report on the Eastern Province for 1872 and which shows a favourable opinion :—

Report of Captain Donnan referred to.

Sir,—I have the honor to return the enclosures of your letter No. 28 of the 13th instant, and the tracing of the survey of Kalkuda bay, which is very satisfactory, showing as it does the bay and its approaches from east, south-east, and south to have deep water, and to be free from sunken rocks or other dangers to shipping. I have no doubt from what I saw of this bay during my visit to it in January last, and from the survey now before me, that the "Serendib" or any of the British India steamers or sailing vessels, up to eighteen feet draught of water, would find snug and safe anchorage during the north-east monsoon, or throughout the year up in the angle of the bay in four fathoms water, where they would ride comparatively steady, with an anchor and hawser laid out astern to keep their heads to the

* See Appendix No. VI.

eastward, from which direction the swell sets into the bay, but never very high, judging from what I saw in January.

Should this place ever be used as a resort for shipping, it would be necessary to lay down a fair way buoy in four fathoms, to mark the anchorage. It would be advisable to extend the survey and soundings north of Vendaloos Point, sufficiently to include the sunken rock with nine feet water over it marked on the Admiralty Chart one mile north-east from the point, as this appears to be the only danger in approaching the bay.

I would suggest a copy of the survey being sent to the Admiralty, as their Chart of the east coast of Ceylon shows scarcely any indentation or bay to the south of Vendaloos Point.—I am, &c.,

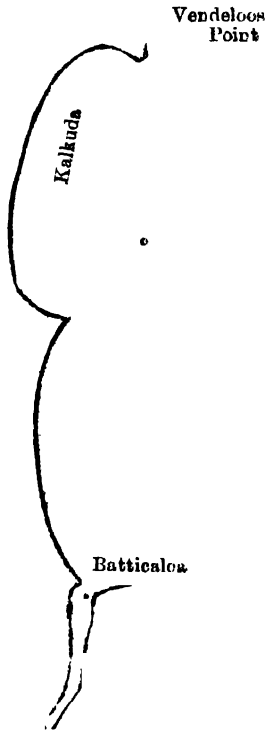
(Signed) JAMES DONNAN.*

The Hon. the Colonial Secretary, Colombo.

How Sir Wm. Gregory's Government after this took no steps about Kalkuda is rather puzzling; but one reason why Sir Hercules may have been so keen about the matter arose out of his view that Nawalapitiya marked "finality" for Railway Extension in that direction, and that the Lunugala-Batticaloa road would probably after a time be the great outlet for all Uva, superseding the Haputale-Ratnapura route for all estates above the Pass. Vain dream! Now, however, Kalkuda Bay is to have a fair trial given to it, and Captain Donnan sees no reason why it should not be found quite safe and sheltered for landing and shipping operations, there being a considerable indentation about a mile long from Vendaloos Point and the only risk being from some rocks which will, of course, be buoyed off. The trend of the coast

* For Capt. Donnan's first and full Report, see Appendix, VI

at this point will be seen from the following sketch :—



By the latest intelligence from the East, we see that the works connected with the adoption of the Bay are completed—a temporary wooden jetty, Customs' officer's quarters and warehouse sheds have been erected and the S. S. "Lady Gordon" will no doubt visit Kalkuda as soon as the north-east monsoon bursts. The extra carriage by land of goods and passengers to and from Batticaloa, will be little thought of, if boating to and from the

steamer can be done with comfort and without shipping seas at every turn as has been the case over the Bar.

To return to our landing, the contrast between the rough tumbling sea outside and the placid waters of the lake after crossing the Bar was very striking. The backwater here forms a noble expanse of water not simply up to Batticaloa (the town of the muddy lake) but for twenty miles beyond into the heart of the great agricultural, rice-growing district. The advantages of water carriage are very manifest, although sometimes—as was the case the other day—through their carelessness in overloading old cranky boats, it may be, serious and fatal accidents occur. A proposal to run a steamboat on this backwater has taken shape and seems not only to be possible, but most promising financially; for of the abundant traffic we shall have occasion to speak later on. Estimates had been got of the cost of building and supplying a suitable steamboat both from London and Calcutta and action was about to be taken when a rise in iron and exchange interfered for the time; but we have no doubt that before long, the enterprising gentlemen concerned will see their way to mature their scheme. In the case of our landing we did not travel by water up to the town, but landing a little above the Bar and driving thence we had the opportunity of watching the deputations that had come forth in gala attire to welcome Bishop Melizan on his first visit to the Batticaloa division of his diocese. The Roman Catholics are not strong in this quarter, or in the Eastern Province altogether, I gathered, as compared with Jaffna where their adherents are described as among the wealthiest of property holders and the Church itself as laying house to house in the

capital of the North and neighbourhood. But strong or not, the Roman Catholics in Batticaloa are numerous enough to be divided into two cliques—the mechanic or Portuguese and the Tamil sections—and these could not at all agree as to the reception of “his lordship,” for the one denied the right of the other to share in that reception at all, and so bitter was the race feeling that even the compromise of the worthy local “Father,” to select four representatives from each party could not be accepted! So that, instead, Tamil and “Portuguese” got up each their own party of reception with appropriate music, flags and carriages and as we passed both at an interval on the lakeside, we could only suppose that the Bishop for the sake of peace would indulge in two landings—re-embarking after the first or “Portuguese” reception, in order to land again in the bosom of his faithful Tamils. At any rate we learned afterwards from worthy Dr. Melizan that the excess of loyalty and devotion of his Batticaloa flock was an embarrassment, from the alternate duties and responsibilities involved. Poor as we understood, most of them to be, they had nevertheless by their offerings succeeded in erecting a grand church—quite a cathedral in appearance—beautifully designed after an Italian model, when just as the time had come to prepare for the roof, the walls began to subside and unmistakable evidence was afforded that the foundations were so faulty that the hope of ever completing or in any way utilising the building was destroyed. It would have been the most conspicuous architectural object in the capital of the Eastern Province and even the uncovered walls stand up conspicuously among the coconut palms, but so long as they remain, they can

only afford a striking reminder of the need of making sure of good foundations.

Our drive from the landing place inside the bar, carried us for some distance by the side of the lagoon, fringed on both sides with coco-palms and backed at a distance by the walls of the Batticaloa Fort. Diverging from the water's edge we turned inland by a road which in its smoothness and surroundings reminded us of the outermost borders of the Cinnamon Gardens, Colombo—only there was no cinnamon visible. We were in reality driving through the northern or Katumunai suburb of the town and a series of roads intersecting low jungle and garden grounds have been planned and carried out by Mr. Allanson Bailey and his successor Mr. Elliott. Very soon we passed from this quarter across one of the branches of the lake into the town-proper, noting a busy but orderly and clean bazaar before rounding in front of the old Dutch Fort and on to the fashionable esplanade with its row of residences and offices—Wesleyan Mission quarters, boarding school, chapel, Jubilee Hall, Post and Telegraph establishment (always a centre of intelligent obliging officers), District Judge's quarters and so on to the Residency, a spacious building in extensive grounds shaded by umbrageous trees. All these residences and offices face the lake, while beyond stretches the palm-covered peninsula and farther out the Bay of Bengal.

The Tamils seem to have been very early in possession of this part of the island calling the settlement "Maticaloa" (from Mada-kalappu, the muddy lake), but five hundred years ago at least the district was considered a dependency of the Kingdom of Kandy. It did not stand very high

in the list of titles of the King or "Emperor" which usually included Uva, Kotte, Jaffnapatam and Trincomalee as "Principalities," but put Batticaloa down as an Earldom, thus the list ran:—"Prince of Trincomalee, Earl of Cottiaar and Batticaloa." Nevertheless, Batticaloa very early became an object of conquest and the Portuguese took the place and built a fort in violation of their treaty with the King of Kandy. This fort was a poor affair, however, and was quickly taken and levelled by the Dutch who on the same little island Puliyan-tivu,—the island of tamarinds—erected a grim quadrangular stronghold which is (after 200 years) still standing though the surrounding ditch described 40 years ago as swarming with crocodiles, seems now to be filled up. The esplanade between the Fort (now, utilized for the kachcheri and other public offices) and the Residency was once a regularly laid-out garden after the Dutch fashion with a reservoir in the centre full of tortoises and small fish. Now, this is the general resort of the young people of the town affording room for cricket-pitch and tennis ground, while one portion has been walled off as a neat little cemetery. The most conspicuous object there at present is a monument to the late Mr. Jonathan Crowther, Proctor—a selfmade Tamil who rose to an influential position. It bears the following inscription:—

Not gone from memory,
Not gone from love,
But gone to the shining hosts above;
Mid cherubim there he waits his wife,
Who will fly to him from the woes of this life.

A witty public officer who shall be nameless, is credited with disposing of a rather too eager capitalist—who, although well stricken in years, would

fain be purchaser of every bit of desirable Crown land offered for sale—by assuring him one day that there was a very desirable lot in the market which he should not fail to buy.—“Where sir, where, that I may go and see it?” “A most suitable piece and just the thing for you Mr. ———” “Thank you, sir—I will look after it at once—where is it?” “IN THE CEMETERY, Mr. ——— !” (Tableau—a collapse !)

To turn back to the Dutch, their Batticaloa Fort must have been in a position dear to their hearts. Indeed the water-and-canal-loving Hollanders could surely find no such delightful district in Ceylon as that before them here—presenting as it does a series of backwaters affording inland water communication for twenty and thirty miles along the coast, with fertile islands and flat expanses certain to reward the cultivator. This part of the coast was undoubtedly after their own taste and they made a great deal of it as several other remains besides the Fort indicate. We read that the first Dutch ship seen in Ceylon cast anchor off Batticaloa on 30th May 1602—“La Brebis” commanded by Admiral Spilberg,* the object being “to purchase cinnamon.” Up to and well within the British era, “cinnamon” was the one great attraction to traders and invaders of Lanka. As Baldæus well and quaintly puts it, cinnamon has always been “the Helen or bride of contest” whose exclusive possession was disputed in turn by every European invader. Now there can be no doubt that cinnamon in those far away back days, must

*The report of a Dutch admiral visiting Batticaloa in 1602 no doubt alarmed the Portuguese and led them to look after the place for their fortification dated from 1627 but did not last long, for in 1638 a Dutch fleet of six ships of war appeared and speedily disposed of the enemy and their erection.

have been grown freely in the Batticaloa district ; but although the white peculiar silicious sand which we associate with our Cinnamon Gardens in the west, was visible in many places, we could nowhere observe the shrub itself, nor hear of its existence. In answer to our enquiries, indeed, the intelligent old Kachoheri Mudaliyar declared he had never seen nor heard of cinnamon growing in the Batticaloa district ! In Dutch times, there was clearly an extensive cultivation and trade ; but no doubt as the Negombo, Colombo and Matara culture extended and the spice in the first-named especially, proved so superior, Batticaloa cinnamon got neglected and eventually became superseded by that palm cultivation which covers the maritime belt and by vegetable gardens and rice fields. Still that cinnamon grew in the Eastern districts later on is shown by Mr. Brooke's report on the Exploration of the Mahaweliganga since, in 1832, he found cinnamon growing above Calinga on the banks of the river ; while the late Dr. Thwaites of the R. B. Gardens, found it at Batticaloa in 1857.

Whatever may be said of other parts of the island and especially the North-Central divisions, there can be little doubt that never in history was the Batticaloa district so populous or prosperous as in the British era and notably since the days of Sir Henry Ward and Mr. J. W. Birch. The revenue district covers 2,600 square miles, but by far the larger portion of this is composed of what has always been jungle or open park country—suited for hunting rather than occupation, save by Veddass. The population now perhaps 120,000 is nearly all found in the rich agricultural district along the coast, while the town has about 7,000 people

within its Local Board bounds. On all sides there is of course water, but brackish from its close proximity to and communication with the sea, so that at Batticaloa even in its island position, it seems to be a case at times—and this year especially after a drought prolonged to an almost unprecedented length,—of

Water, water everywhere and not a drop to drink. Not only so, but the brackish water has so permeated the soil of fields once under profitable culture as to render them unfit for paddy crops and so to throw them out as useless. One of many plans for the improvement of this town and district which the present zealous, experienced Government Agent hopes to see carried out, has for its object the shutting out of this brackish water from a considerable expanse now permeated by it and so creating a lake of sweet fresh water in the immediate neighbourhood of the town to the great benefit of the townspeople as well as of the cultivators.

Batticaloa has long been famous for its cotton spinning and weaving industry and it is interesting to learn that the Wellawatta Mills drew several useful handicraftsmen from this Eastern town on commencing work. But a remnant still remain to carry on their old craft and manufacture. At one of the Weaving establishments we found some fifteen people at work; three out of the five hand-loom were being handled in a long open shed. The treadle is sunk into the ground in a square opening in which the weaver sits, deftly plying his shuttle. Under another shed several women were employed winding the thread into balls or on to the shuttles, while at a third spot a boy was busily fixing this thread on sticks

fixed in the ground so as to form a large horse-shoe 20 or 40 yards long: The threads were of alternate colours systematically placed to form the warp of coloured comboy or sarong material. The threads would be sized or stiffened the next morning, and then transferred to the loom. From the manager, we learnt that the weavers earned from 37½ to 50 cts. per day according to their work; also that they had lately sent away six men to Colombo to work at the Spinning and Weaving. Mills and could send plenty more if required. They have left off making godown towelling in Batticaloa and confine themselves mostly to these cloths. So popular do these local manufactures continue in some parts of the island, that between Colombo and Galle there are villages with conspicuous notices telling the people that "Batticaloa cloths are sold here."

A morning's visit to the Hospital and Gaol sufficed to show that both establishments are admirably looked after: the former, under Dr. Chinnayah's care, in its clear open healthy grounds and clean spick-and-span wards being specially attractive; while the gloom of the solitary cells in the latter was not sufficient to make us disbelieve the old story of a prisoner being found after 6 p. m. loudly knocking at the door of the Batticaloa gaol, explaining in answer to remonstrance, that they had gone and locked him out—evidently a great grievance! That was in the "days of old" however, and a favourite story of dear old "Billy Hall." However we saw evidence of hard work done by the prisoners in stone-breaking, carpentry, coirmaking, &c.,

Driving round, the bungalow is pointed out where poor Mr. G. B. Capper of the Survey Department resided when he was murdered by a cooly. It was pay-day, and among the gang to be settled with, one man was particularly obstreperous. At last to get rid of him Mr. Capper walked him off the verandah through a little flower garden, putting him outside a little wooden gate in front, when the fellow turned, and leaning over the gate or fence, stabbed his master behind the shoulder and, as it proved, to the heart. Another instance of the evil of natives carrying pointed knives.

Fish and very good oysters—on rocks near the bar—are abundant in the Batticaloa lake and as already mentioned the Tamil, fishermen of the district confine themselves to the backwaters, leaving the coast and deep-sea fishing to the more enterprising Sinhalese who coming round from the neighbourhood of Galle, form settlements on the coast some of which are likely to become permanent.

The Forest Department here as in nearly every capital and district in the island is now very much in evidence, through the piles of logs of timber all duly squared and marked lying on the side of the esplanade facing the lake ready, we suppose, for disposal or shipment. But the general complaint in the Northern and Eastern, but especially the Central Provinces, made to us is that the Department is placing too high a price on its wares, whether fuel or timber, and in fact one is inclined in thinking of the matter to ask Col. Clarke to remember the character given by Canning to the Hollanders :—

In matters of commerce, the fault of the Dutch
Is giving too little and asking too much !

*BATTICALOA AND COCONUT CULTI-
VATION IN THE EAST.*

EASTER SEATON AND KARAITTU.

THE DUTCH IN LOVE WITH THE EASTERN
BACKWATERS.

FORTY MILES SOUTH: OLD FRIENDS AND OLD
RESIDENTS:

SIR EDWARD BARNES ENTERTAINING:

A FANCY BALL AT MT. LAVINIA SIXTY YEARS AGO.

Leaving Batticaloa on a sunny afternoon to visit the great Southern agricultural division of the district, our route lay across the ferry to the peninsula or island formed between the "gobb" or backwater and the Indian Ocean. This strip of land is some 20 miles in length by from 1 to 2 in breadth, and is now covered almost throughout its entire extent with the coconut palm and, save where extensive plantations have been formed under European auspices, is densely populated after the fashion of the most crowded section of native coconut gardens and villages on our Western coast. On this peninsula and the strip of sea coast in continuance both on the North and South,—say over 60 miles in all from Valsichchina to Tirukkovil—is found by far the larger portion of the 120,000 people in the Batticaloa district and the traffic with the capital in both passengers and produce is very considerable. For the rent of the crossing ferry and toll as much as Rs150 a month are paid, and, as already mentioned, large numbers traverse by boat the whole length of the lake, so that if there were a little steamer running the full distance of 24 miles calling at a series of landing-stages or jetties along the side of the lake, the enterprise could not fail to be remunerative. We hope the local

capitalists who have already interested themselves in the scheme, may shortly see their way to put it through.

Arrived on the other side, with horse and conveyance released from the ferry-boat, our drive lay through a succession of Moormen and Tamil villages—the people here being described as very well off, owning coconut gardens in addition to their interest in paddy fields. One peculiarity of the Moormen is their round flat topped cotton caps, in place of the pointed conical ones to which we are accustomed in the West, while among the Tamils, the habit of all boys and unmarried men of tying the condè on the side, in place of at the back of the head is noticeable. As soon as they get married the ordinary form of a laqi at the back is adopted. The Moormen of the Batticaloa district are described as a very well-to-do people ; in the peninsula they have some five mosques in all and yet very few quarrels arise. They take an interest too in education and apart from their mosque schools, it was pleasing to see “ tamby ” lads occasionally in the mission vernacular schools ; for scarcely a village was passed without its adjunct in a Wesleyan school very simply built with slight pillars, low walls on three sides and eadjan roofs (the children in many cases using ola books,) but each such school affording an evidence of advancing education, the pioneer of Christianity.

This reminds us to state that Batticaloa town has its full share of churches and chapels : the Anglican building is a neat little structure on one side of the esplanade in charge of an S. P. G. agent ; the Roman Catholics and their chapels have

been already alluded to ; while the most important perhaps in view of the larger proportion of the intelligent, influential Burghers and Tamil residents, whom it reaches,—the Wesleyan Mission has multiplied its branches of Christian and educational work in the town, district and over the Eastern Province generally. The Wesleyan Chapels, Boarding Schools, Jubilee Lecture Hall, Dispensary ministered to by a medically-trained Christian lady and ordinary vernacular schools in the town are very much in evidence and the influence of the Mission among our Eastern population is most important.*

That Christianity is making its mark in the outlying villages, is evidenced by the trouble experienced of recent years through the rivalry and jealousy of different castes : the fisher and barber divisions among the Tamils especially. Because men of the latter caste, under the influence of education, were beginning to assert their independence of some of the old caste customs, the former or fishers were provoked into breaches of the law. The use of umbrellas especially, by the so-called lower caste folk, was considered very unjustifiable and led in the very district we were now passing

* The missionary in charge at Batticaloa, the Rev. J. (and Mrs.) West, was unfortunately absent, and it was holiday time for Miss Trimmer's Girls' Boarding School, where 60 to 70 girls are taught in particularly nice airy premises. Another interesting school is the vernacular girls' and boys' mixed, originally started 40 years ago by Mrs. Joshua and well kept up. A training institution for teachers in the vernacular was very simply but adequately conducted, some 15 of the future schoolmasters of the district getting their training there. Miss Gamble's Dispensary is freely visited and availed of and even the Moorman families in the villages are beginning to profit by her ministrations. The Mission has also a press, chiefly for printing Tamil school-books and other requirements for the work.

through, to assaults and village brawls culminating in the burning down of a school-house belonging to the Wesleyan Mission. Of course, the agents of the latter body give no countenance to the tyranny of caste and naturally the weaker ones as they get education and Christianity into their midst, begin to feel that it is time for them to assert themselves. The Moormen proper care for none of these things, and are as we have said a very lawabiding people in the Batticaloa district. Then there are several villages of "Mookwas" who are supposed to have come originally from Southern India, bent on piratical raids, and who are looked up to by the ordinary natives.

Apart from noting the many villages passed, their order and cleanliness and the evidence of progress in schools and cultivation, the chief attraction of the drive along the peninsula was its passage through extensive scenes of Coconut Cultivation. In the Batticaloa district altogether there are between 5,000 and 6,000 acres planted with the palm on regular plantations apart from the villagers' gardens which must make up a good deal more. North of Batticaloa town along the coast and for some distance inland there are several plantations belonging to such pioneers as Mr. S. O. Munro—still to the front we are glad to say—and the Atherton and Sortain families, the late Dr. Sortain having been one of the earliest to begin systematic planting in the Eastern Province, his work dating back to the early "forties." The Taylor Brothers, Colonel Spencer, Dr. Orr, and Colonel, then Captain, Balmain, are other names familiar in the days of old as planters or proprietors, and some of them still own property. Farther south in the direction we are now travelling, we come on the plantations owned or managed by

the late J. Gordon Cumming and by Messrs. Carey and O'Grady—Messrs. A. Nicol, Keir, Ouchterlony and Mackilligan being among those who adventured their capital in the district. We were glad to meet Mr. John Carey who may now be said to be the patriarch among Batticaloa planters, for hale and active as we found him, Mr. Carey dates back to 1845 in the island, and all the time in this Eastern lowlying district with very few changes either to England or our hill-country during the interval. This speaks well for the healthfulness of the Batticaloa sea coast region. We passed through the splendid Easter Seaton property managed by Mr. Carey for Mr. Ouchterlony. It covers 1,500 acres in all,—extending across from the backwater lake to the Indian Ocean—of which 700 to 800 acres are under the palm. Mr. Carey himself owns several properties and one of these through which our road ran, presented a melancholy appearance in the dead or dying condition of a large number of the trees. This is attributable to a prolonged drought taking effect on cultivation in a rather lighter soil than usual, the trees withered by the drought being afterwards attacked by moths and caterpillars for which they formed only a too easy prey. There is, however, another explanation which I am bound to record, namely that injury was done to the roots of many of the trees affected through an experiment in ploughing with elephants between the trees. If this were proved, it would show that the coconut palm is inimical to root pruning, a result with our western experience which can scarcely be accepted. Far more probable is the reason recorded by Mr. Robert Morris in

his Administration Report on the Batticaloa district for 1867 as follows:—

“I have in former reports alluded to the large numbers of Coconut trees injured or killed by the drought of 1866. A secondary symptom was the appearance, after the drought had ceased, of a species of blight, which turned the leaves brown, and seriously checked the producing powers of the trees. This pest now has appeared, and the condition of this branch of agriculture is favorable, though the effects of the blight and drought are shewn in a falling-off in the export of Koppara this year to 3,901 cwts from 8,000 cwt. in 1866. The unprecedentedly high price of Koppara however makes Coconuts a promising speculation. The price of Koppara here last year ranged from 80s to 95s per candy, being about 15s higher than the rate in Colombo. The price in 1866 was about 60s to 70s.”

Mr. Elliott in his Report for 1883, remarks:—

“European enterprise many years ago gave the District a trial, and there is a considerable extent of land under coconuts. Some of these estates pay fairly enough, I believe, but others are very poor. Nearly all have, during the past two years, been infected by a description of caterpillar which destroys the leaves, killing many trees and materially reducing the bearing of all. The lighting of large fires fed with green stuff to produce a dense smoke seems to be the only antidote adopted, and it is not always effective. Curiously enough, this pest does not seem to visit the trees in native gardens immediately adjoining infected estates. I have seen a luxuriant grove in a neglected native garden, but free of caterpillars on one side of the road, and on the other an estate under European management carefully tilled and scrupulously clean, apparently nearly snuffed out by this plague. If I was correctly informed, the number of trees infected with caterpillar was on the decrease, and with increased crops and a rise in the price of coppara, the

prospects of coconut proprietors had improved at the end of the year."

After leaving Easter Seaton where the striking avenue of palms all along the road, and indeed as far as the eye reached, looked most flourishing, with evidences of careful cultivation and good management,—we came on some "estates" belonging to McCormen and then emerged on low scrub waste land, and at this southern end of the peninsula there is evidently some room for expansion although perhaps the soil is not very promising. At various points along our road as well as in other directions in the Eastern Province the "Wara" (*Calotropis gigantea*,) yielding a cotton of a fair staple is very common. The Government Agent has had a quantity gathered and sent to Colombo with the result that a value of 30 cents per lb. has been placed on it at the Spinning and Weaving Mills. Cotton as well as tobacco have been cultivated on a small scale in the Batticaloa district for many years back, and in 1874 Mr. Hume reported that out of several kinds experimented with "Pernambuco cotton" did best. However where irrigation is available, it is quite evident that paddy-growing suits the genius of the people best and is the most profitable in proportion to the labour bestowed upon it, though it would be of immense advantage to secure supplementary products less dependent on moisture; and more especially on the richer soils of the interior to encourage cassava, mandioc, Indian corn, &c. That these can be widely cultivated in the Eastern Province, we had afterwards demonstration during our journey inland, and we find the following among the past records, confirming what we have already stated about the fishermen. In his Admi-

nistration Report for 1886, Mr. F. C. Fisher wrote :—

“ In addition to rice, kurakkan, and Indian corn, large quantities of plantains and manioca are grown on the chenas in the interior, and form an important item in the food supply of the people. It is estimated that there was an outturn of 15,000 cwt. of the cassava root, which was sold at about R1.12 per cwt. The quantity of plantains put into the market is not easily estimated, but they form a very considerable item in the dietary of the poorer classes. Fish forms another and very extensively used article of diet. It is mostly eaten fresh, and little is locally salted and cured, except by the Sinhalese fishermen, who resort from other parts of the island to the deep-sea fishing grounds on the coast. Sea-fishing is scarcely practised by the natives of the province, the shallow lagoons and backwaters affording an abundant though inferior supply of fish for local requirements. Very little garden produce of any kind is raised, and for this reason the failure of the paddy crops must always be productive of great hardship to the poorer classes, who have nothing to fall back upon when the supply of rice fails. The cultivation of breadfruit and jakfruit has been scarcely attempted, and the growth of vegetables is almost entirely neglected. These remarks apply more particularly to the Batticaloa district, but the circumstance of the Trincomalee district are very similar.”

We had now traversed the peninsula and arrived at a ferry crossing a branch of the lake separated from the sea by a narrow bank. In flood time, the waters naturally rose above the barrier and salt and fresh water intermingled. To prevent this, as well as to supersede the old-fashioned ferry, a causeway has been constructed at this point, (“ Ontachchimadam ”*) costing R30,000, which is in itself a work of art. It was nearly, but not

* Who can give the explanation of this name being applied ?.

quite, finished as we passed, but has since been opened. The importance of keeping the water bordering on cultivated fields sweet and fresh cannot be overestimated; for in the neighbourhood of Batticaloa town, large areas of cultivable land have had to be abandoned for regular culture by the people, simply because of the over-impregnation of the soil with salt; and a very important scheme under the present Agent's care is a barrier across one waterway near the town which would sweeten a large water division or lakelet and lead to its borders once again being covered with paddy. This rapid impregnation of the soil with salt is doubtless the reason why the Batticaloa coconut planters have always cared very little for salt as an application to their trees, although the marshy stuff dug out and applied must have abundance of saline particles.

Passing the great causeway, after a short drive on *terra firma* we come to another arm of the lake almost debouching on the sea and here again we have relics of the old Dutch times. The last crossing was Ontachchimadam, and here we are at a point where the first Dutch ships are said to have been seen off the coast, and if so we can quite enter into the delight of the Hollanders at the prospect of a country with a grand expanse of inland water or canals as far as the eye could reach. The backwaters or lake extend from this point 20 miles north, 6 to the south and 10 inland.* At

* Mr. Elliott in his very valuable Report of April 1886 on the Commutation Settlements which he had carried through as Grain Commissioner, enters fully into schemes for still further improving the water communication of the district—in some parts by re-opening old Dutch connecting canals which have got closed up: in this way he would like to see boats enabled to pass from the Natur river in the far

Ontachchimadam, a curious evidence of the work of floods from the interior is presented in the washing away of the soil round several deep brick-lined wells, so that the walls at one time all below the surface, stand now several feet above the ground ! The Dutch are said to have constructed a temporary fort near this point, Kalaar, while the Portuguese held Batticaloa. The resthouse at Kalaar is very pleasantly situated in front of the still waters of a branch of the big lake, while a little way farther out the eye rests on the deep blue of the Indian Ocean. This spot is 25 miles from Batticaloa by our route and it may be worth putting down the oft-jawbreaking names which distinguish the villages or stations along the road :—

Puthumotuvaram, Kalladi, Upodai, Manjantondosai, Kattankudiyiruppu, Palaimunai, Amedimunsai, Thallunda, Puthukudiyiruppu, Karnakolen, Naripatanveli, Cheddipalaiyam, Tetataivu, Kalutanalia, Kaluyunnuki, Eruvil.

Batticaloa can in fact compete with any part of the island in the length of its names. A favorite quartett runs as follows:—

From Puliyantivu
You go to Purikadavally,
To Illapuddychena,
To Teruchilansholei!

Another name we came across where three roads meet is "Uragastoomanheya." This reminds us

North via Batticaloa to Sambukalappu in the far south. The advantage is well shown in the fact that although the roads alongside are admirable—smooth and level—and cartage cheaper than usual, yet water carriage of paddy &c. can be effected at one-third the cost of cart transport: for instance from the centre of the rice-growing district to Kalmunai, 16 miles on an excellent level road, Mr. Elliott found it cost 50 cents to cart each amunam (7½ bushels) of paddy, while from Kalmunai to Batticaloa by boats for 24 miles, the charge is 25 cents.

of a paragraph that recently appeared in a Madras paper on "how to name a railway station":—

"There being a station on the Southern Mahratta Railway called Giddalur, the Agent and Manager of the Madras Railway Company consented to change the name of Gudalur Station on the Nilgiri branch of the Madras Railway, especially as there is no village of Gudalur near that station. The name consequently being a misnomer, they suggested that the station be called "Peranapolayam," but the Collector of Coimbatore was of opinion that the meaning of the name of the village would be lost if the proposed name was adopted, and suggested that the correct name, Periyankanpalayam, be adopted. But the Consulting Engineer for Railways objects to accept the name proposed by the Collector, as it appears absurd to call a small station by a name consisting of twenty-one letters:

Man wants but little here below

But wants that little—*short*.

The Collector has been asked to substitute a smaller name of any other village near the station!"

Our next stages, through large villages, ran Nilavanai, Pandirepu, and then we came to Kalmunai, a prosperous little town, with its Gansabawa or Council, the occasional headquarters of the Agent or Magistrate, the fixed residence of the Road Officer of the district; of a Doctor and Hospital, of a European Agent of the Wesleyan Mission, with church and schools. A branch road from the town runs inland to Kittangi ferry at the head of the lake, whence there is much traffic by boats to Batticaloa, the paddy being brought down from the irrigation district chiefly by a road on the opposite or Chavalkadai side. It is from this point that the steamer proposed by Mr. O'Grady and friends would start for the capital, the distance being 24 to 25 miles, and

there can be little doubt of an abundance of passenger as well as produce traffic being available. We are now at the beginning of one of the great native agricultural or rice-growing districts of Batticaloa. The harvest is over, but there are still evidences of very active business in the crowded but cleanly bazaar—there are three distinct markets—and along the roads. These latter do credit to Mr. Macpherson whom we find busy paying his overseers and coolies and with all the evidences in his neighbourhood of very multifarious work for the benefit of the district.

We do not stay at Kalmunai, this time, but push on to Karativu coconut plantations in obedience to the request of the hospitable proprietor, Mr. W. H. O. Grady, with whom we found an old Colombo friend in Mr. J. B. Morphew so well-known in connection with the old Oriental Bank in its most prosperous days. Many an acquaintance and story of "auld lang syne" were recalled that evening as we sat within hearing of the roll of the waves from the Bay of Bengal on the seabeach in front of the mansion. But far back as our recollections of thirty years or so extended, they were as nothing to the most interesting reminiscences conjured up by Mrs. Morphew, senior, who is now in her 94th year, having been born in 1797—so that her life nearly covers the whole term of the British occupation of Ceylon—but still in the full possession of her faculties, bright and vivacious. We suppose it is almost unprecedented in the history of colonies, to find two ladies of the age of Mrs. Morphew and Mrs. Winter, senior, of Baddegama, Galle, venturing back from the mother-country to far distant Ceylon when well over 90 and 80 years respectively. Mrs. Winter being, we believe, ten years the

junior of the grandmother of the owner of Karativu. Mrs. Morpew first came to Ceylon as a married lady of several years' standing with her husband in 1830; but she was in time to see Governor Sir Edward Barnes and to be present at a grand Fancy Ball given at his viceregal residence at Mount Lavinia—now the wellknown hotel. It was on this occasion that a very trifling matter led to a serious duel (pistols and coffee for two) between a military officer and civilian—a duel being by no means an infrequent event sixty years ago. On the occasion in question, Colonel Churchill as A. D. C. had to announce to the Governor, the ladies and gentlemen as they passed in, doing so in a clear voice, giving the character assumed. In one case, the lady being in evening dress, her husband whispered "no character"; and the gallant A. D. C. gave this out as "a lady of no character." For this supposed insult he was called out by the indignant husband! Mrs. Morpew returned to England in 1838, came back to the East in 1851, went home in 1860 and returned again in 1889. Her clearness of vision is most wonderful, for not only can this nonagenarian lady—who, we trust, will pardon our frequent mention of her name—thread a needle with ease, but we found her on the following forenoon, busy with her sewing machine. Batticaloa has indeed reason to boast of old European residents, with Mr. and Mrs. Carey, dating as colonists, from 1845, and Mrs. Atherton, senr., who has exceeded the ordinary allotted span of human life and is, perhaps at fourscore, in the enjoyment of very fair health.

Karativu coconut plantation is succeeded farther down the coast by two or three more properties—Vaddolodai, Nintur and Oluville—under Mr.

O'Grady's care, while away 20 miles to the south is Tirukkoil, where Mr. Fanshawe of Madulsima holds a seaside property, partly planted with coconuts, and near to which is a temple which Sir Arthur Gordon photographed. Karativu, from what we saw and learned that afternoon and next day, has many elements of interest in connection with its management. Elephants are regularly employed, chiefly in carting the nuts from the different fields to the home station, the cart-wheels having particularly wide tires to prevent them sinking in the sand; each cart carries 2,000 nuts. The nuts are cut off by a knife attached to a long pole, the trees not being so high as many in the West of the island. The yield is from 40 to 50 nuts per tree per annum: one fine place gives an average of 55 nuts; 1,150 nuts go to a candy, against the usual allowance in the West of 1,200. Trees in favourable spots have been known to bear nuts in $4\frac{1}{2}$ years; but 7 to 10 years is near the average and then under favourable circumstances. Careful and liberal cultivation is the rule, and the reclamation of marshy land by the erection of large mounds of earth on which the young coconut plants were inserted and carefully tended, was particularly interesting. Mr. O'Grady chiefly favours the Negapatam and Calcutta market with his crop of copra, and he had a ship off his beach, loading for the latter market as we were there. In this case, the shipowner or master was purchasing on his own account, paying for each delivery of copra as it was weighed over on the spot. A better price is got for Batticaloa copra than for that of the Western Province, and it looks much cleaner and whiter, a fact that renders it popular with the Indian Baboo consumers.

Analysis has shown the Batticaloa coconut kernel to be richer in stearine than the average Ceylon nuts. At Karaitivu nuts are kept in the husk sometime, and then split open to dry,—the husk being still retained on the half-nuts—all the copra being sun-dried. One man will split 4,000 nuts a day. The husks are sold to the natives, sometimes in exchange for straw. Labour is cheap in the neighbourhood, that is when paddy cultivation or harvesting does not call the people away:—men 20 to 25 cents a day; boys from 6 or 7 cents. It must be remembered that paddy is generally very cheap here 80 cents to a rupee a bushel often, so that a day's pay goes far in food. Mr. O'Grady has baffled the attacks of beetles and moths by lighting large fires and so attracting them to destruction.

Apart from his steamer enterprise which we trust will take early effect, Mr. O'Grady has imported a whole set of patent paddy-husking machinery with the needful gearing for attaching cattle-power. It has been found to do its work well, but unfortunately, the cattle available scarcely make up sufficient power, and it is proposed to substitute a steam engine. That there is plenty of scope for such machinery is evidenced by the eagerness of wealthy native grain dealers to enter into contracts for the monthly husking of large quantities of paddy. In the absence of such machinery, a large force is now employed laboriously husking by hand at different points for Moormen dealers. The Karaitivu machinery is suited both for husking and pounding the paddy and can get through 15 bushels an hour. It cost altogether about Rs5,000.

*THE GREAT EASTERN RICE-GROWING
AND IRRIGATION DISTRICT.*

Before plunging into the centre of the grand Irrigation district westward of Karaitivu, let us return for a little to Kalmunai and consider the paddy-growing division in the neighbourhood of that flourishing station. First of all, however, we would point out that the population including the agricultural folk, —the holders of the land as well as the large body of cultivators—cling for residence to the palm-covered sea-coast. The population in villages or scattered gardens runs all down within two miles of the sea-borde. Inland even across the thousands of acres of cultivated land, there is no appearance of townships or villages, and even the topes of palms or other fruit-trees with a few huts are very few and far between. Facing Kalmunai we have in what may be called the lower section of the irrigated land some 3,000 acres all fit for paddy, but which unfortunately during the season just then closed (the end of August) had borne only poor and scattered crops owing to the failure of rain: a failure scarcely ever experienced before. Nevertheless, there were signs of late harvesting in some of the fields; in others of stacking the sheaves; and again of threshing out the corn in primitive oriental fashion. We came on the scene, emerging from the hitherto palm-shaded road on an afternoon which might be the close of a warm summer day in the old country, and as the wide expanse of field after field, of level corn country presented itself as far as the eye could reach, and the voices and songs of harvesters, gleaners, or the workers on the threshing-floor were

wafted across to us, it seemed as if we had been suddenly transported away from Ceylon land a tropical land altogether. We were at too great a distance to distinguish figures from the road—there was nothing in the outlook, no vegetation to remind us of the tropics. There was the glance of water on the one border touching the head of the lake, and here we thought of "the Norfolk broads," and we might also almost sing,—

Oh, Mary call the cattle home,

Across the sands of Dee,—

but farther on, as the grand expanse of arable land—of the soil we could not judge—opened out before us, we could imagine we were at home in "the Lothians," or in Easter Ross with its splendid succession of what were thousand-acres wheat-growing farms in our time, thirty years ago. By-and-by the illusion is dispelled, for a turn of the road brings us face to face with a fine-looking Headman attended by what seemed a whole village by way of retinue. He was one of the Vanniyas of the district, and albeit naked from the waist upwards, his grand turban and really noble cast of countenance would have arrested attention anywhere. He made his obeisance to the Agent and related how he was returning from investigating some land or irrigation dispute, accompanied by servants and the villagers concerned. The hearing of particulars was put off until the representative of Government could himself examine into the dispute on the spot. And it is evidently a great matter with the people of this large agricultural district to have in their Agent one who thoroughly sympathises with and understands them, their language and

habits of life, their mode of working and thought, and who, moreover, among Moormen as well as Hindus, from his satisfactory decisions leading to the settlement of longstanding disputes, has got the reputation of finding out all about their cases and settling them as "if he were a god!"

The fact is that the Agent has found out the great advantage of hearing complaints and accusations on the spot, before those concerned and the assembled heads of the village, and decisions given after such a hearing are much more likely to afford satisfaction to both sides and to prevent resort to the distant law courts with prolonged litigation, heavy expense and embitterment leading perhaps to a deadly feud. Nothing too affords such an insight into the thoughts, feelings and habits of the people as such judicial investigations undertaken on quarterly itinerating visits by revenue officers. The saving in correspondence is immense, and the people are quite content if they know the head of the province will shortly be on the spot himself to see to their difficulties and grievances, hear all they have got to say, and decide in their very presence what must be done. Again, the encouragement of the people in keeping up to their work and in carrying out improvements, as well as the examination of new proposals for extending irrigation and cultivation, form an important part of the business transacted during such visits.

So far, we were merely skirting the great paddy-growing country at the close of a day's journey. Next morning we travelled 14 miles through the heart of some 20,000 acres of cultivated land with scarcely an interruption in the constant succession of fields marked off by the boundary ridges common

to paddy fields, the road occasionally passing over a culvert to allow the irrigation stream to pass from one side to the other. We could not help thinking of "Varmer Porter" driving through Cambridgeshire to his own home in the Fen country and telling his companion Alton Locke:—

"I'll shaw 'ee some'at like a field—I wool—none of this here darned ups and downs o' hills" (though the country through which we drove was flat enough, I should have thought to please any one) "to shake a body's victuals out of his innards—all so flat as a barn's floor, for vorty mile on end—there's the country to live in!—and your sons, vour on 'em, every one fifteen stones in his shoes to pitten again' any man from Whitt'sea Mere to Denver Sluice."

We should expect a colonist from the English Fen districts to feel very much at home in the grain-growing country south of Batticaloa. But there is enough of local interest in the land we are driving over without going to the old country for companion pictures. We are in the midst of the district first taken in hand for reclamation and irrigation purposes by Mr. Birch—we are approaching some of the earliest British experiments in Ceylon in costly irrigation works. Memories of Sir Henry Ward, of J. Woodford Birch, of Captain Philpotts and others of that time, 35 years ago, crowd upon us at every turn. Severely criticised at the time—and among the critics if we remember rightly, was a young Surveyor then stationed at Kalmunai who had but lately come from the Crimean campaign in which he had borne an honourable part, to join the Ceylon Survey service—the works and the results have long ago amply justified the expenditure and anticipations. Mr. Birch estimated for the bringing under

cultivation of 20,000 acres: the actual result to date is 28,000 acres, while the whole district has 75,000 acres more or less fit for paddy cultivation. The great advantage here, as in Matara district, was the existence of population on the spot ready and eager to take up every acre made available by irrigation. It was not our good fortune to see the 20,000 acres tract we passed through a picture of living green as described by Sir Wm. Gregory in 1872, when he wrote :—

“In the month of April 1872 I visited the rice-growing regions of the Eastern Province, which are the creation of the irrigation works carried out by Government. I never before saw such an unbroken sheet of grain: save where some isolated trees, part of a recent forest, broke the view, the eye wandered over some 20,000 acres of green paddy. I saw, wherever I went, a sleek, vigorous, well-fed, and thoroughly healthy population. The great impetus to paddy cultivation in this Province was given in 1857, when the restoration of the important Irrigation Scheme, of which the tanks of Irakkamam and Amparai are the most prominent features, took place. Up to 1864 the lands under cultivation were 54,000 acres; the lands in cultivation in 1871 were 77,000 acres. The Crown lands to be additionally reclaimed under works already completed or in course of completion amount to 15,900 acres, equal to the support of 23,850 persons.”

But standing near the same spot we could imagine how the country must look in a favourable season, with the green or golden corn waving uniformly for many miles on all sides, contrasting with the fringe of coconuts on the seabelt hiding the cultivators' huts, and with the back-ground of low jungle on the West, backed by such striking hills as Friar's Hood, the Baron's Cap and on a clear

day, the outlying Uva ranges, while northwards the glistening backwaters showed the limits of the Kalmunai paddy fields, and far to the South similar rice fields extended far beyond our ken. To keep up with the steady extension of cultivation, which has gone on far beyond the original estimates, it is no wonder though the water supply in the tanks should occasionally get short, even in seasons when the rains have given their full contribution. How much more in a year of failure of monsoons! More storage tanks are no doubt required to ensure the steady supply year by year of the indispensable fertilising fluid. Moreover, it is rather too much to expect, as some do, that tanks are to render the people independent of seasons of drought. The oriental proverb ought to be remembered: "The lakes will not become full with dew, but with rain." Halfway on our morning's drive we came on a small village of Moormen under a tope of palms, the exception to the level expanse which the paddy fields present on all other sides. Moormen play a large part in the agricultural industry of the Eastern Province. They are a peaceable, hard-working, money-making people; their women and children too do much work in the fields. They probably do not hold all the superstitions of their Hindu neighbours, though we suppose from their speaking the same language and being so closely allied that they share in the sowing and harvesting customs of the district. An interesting account of their customs was written in 1871 by Chief Mudaliyar Somanader and A. de Zylva, Irrigation Mudaliyar, from which we extract as follows:—

For threshing, Thursdays are considered the best day to commence, and certain charms and ceremonies are

performed to keep off, "Putams," or devils, from carrying away the fruits of their labour. The charm is called "Arrakku," which consisted of the following stuffs shut up in a box, viz., silver, copper, iron, coral, pearl, chanks, valampuri (a fruit), chadaimudi (a vegetable), and some arrack in a vial, and buried in the centre of the threshing-floor with margosa leaves, &c., over which the sheaves are heaped, and the cattle turned on them for threshing. In addition to these charms and ceremonies to keep off the devil from stealing the paddy, they begin to use a peculiar slang to keep the devil ignorant of what is spoken. For instance, the threshing cattle, instead of being termed "Madu," as usual, go by the name "Varikkalan," the meaning of which is productive-legged; the "Marakkal" or the measure is termed "accountant;" the baskets are called "Peruvayan," or broad-mouthed, and every implement has a different name in the threshing-floor. All expressions that have meaning suggestive of decrease or other ill-omened significations are avoided, and the word "multiply" is always substituted. For instance, the expression.

Drive the bullocks	...	is rendered Multiply the "Varikkalan."
Sweep the corn	...	„ Multiply the "Poli."
Bring the Marakkal	...	„ Multiply the "accountant."
Fill the basket	...	„ Multiply the "broad-mouth."
Bring some water	...	„ Multiply some flood.
Go home for rice	...	„ Multiply home for white.

Call him to take this

and deliver it at home	„	Multiply him to multiply this and to multiply at home
&c.,	&c.,	&c.

In threshing, cattle are driven with a song, the purport of which is to invoke the deities to give them a good produce.

We have seldom met a more intelligent headman than the Chief Mudaliyar of the Batticaloa Kachcheri - indeed a notable man every way, in appearance as well; and the same applies to several of the district headmen, Wanniyas and others, we came across. But it was one of the peculiarities of our late Governor that he never seems to have felt any interest in Tamil Headmen. Passing through the Eastern Province he gave them little of his attention, but when near the Southern boundary, on Sir Arthur Gordon being told that a "Ratemahatmaya" was in attendance, His Excellency brightened up at once and had him admitted, although the man was one of those stupid Sinhalese who had not two ideas to put together and not worthy to loose the sandals of Somanader Mudaliyar for faithful, long service, handsome bearing and keen intelligence! Among Tamil headmen, therefore, so far as we could learn our late Governor is by no means remembered with the feeling of regard held for him by most of their Sinhalese compeers.

Our drive of some 15 miles from Karaitivu in a south-westerly direction through continuous paddy-fields (then lying fallow) brought us to the series of anicuts—Sendapadi, Veereade and Kurunkangi—so familiar in the history of our Eastern irrigation works, almost of historic interest in relation to the names of Capt. Philpotts, R.E., Mr. Birch and Sir Henry Ward. Apart from the engineering interest in the huge piles of masonry built across the streams leading from the Irakkamam and Ambarai tanks, we are here at the head, or the key, to the irrigation of all the far-extending district lying Eastward and Northward to Karaitivu, Kalmunai and Samanturai. At these anicuts, the

precious water from the tanks is switched from the main current into rivulets running south, east or north as may be required. There are guardians over these main distributing works, and there are irrigation and village vidanas or minor headmen to follow and regulate the distribution for each series of fields for many miles from the main source of supply.

It must be an extremely interesting sight to watch the irrigation and farming operations in full swing—such was not our good fortune—and still more to be in the midst of the people when reaping an abundant harvest. They can be light-hearted and happy enough at such a time. Even at the end of a very unfavourable season we had a glimpse at what an abundant and happy “harvest tide” must mean to them. Between May and August in such a time, crowds of the people, pass along the roads leading into the fields, morning and evening, going and returning from their work—often in the latter case carrying the reward of their day’s work in a small bag of paddy, hired labour being paid in kind. This leads to a great deal of barter and temporary boutiques are opened by Moormen and others at convenient points to buy the superfluous grain. In years when from 200,000 to 300 000 bushels are exported, besides the supply furnished to Batticaloa and other local towns and villages, the business and traffic it will be seen, must be very considerable. [The largest export was 306,500 bushels in 1888, nearly all to Jaffna.] As many as 5,000 loaded carts pass out of this district in a busy season; most of such carts are altogether of wood, wheels, axles and all, and cost about R18 each. In such a prosperous season as we

describe, an abundance of money circulates in the district—the people are all well off—and being free of many of the temptations incidental to native life in the West of the island, they are more thrifty and have begun to learn the use of Postal Savings Banks. The change for the better in this part of the country within the past thirty years has been very remarkable. True, one civilian with antiquated notions was found bold enough to remonstrate in the early “sixties” that the days of old when there were no exports of grain from the district, were better and the people then happier! Governor Sir Charles MacCarthy very speedily suppressed that notion by declaring he had not so learned the lessons of political economy. It reminds us of the anger of ignorant Celts at Irish shipping ports because the Sassenachs are ruining “Ould Oireland” by taking away all the pigs and butter!—The way in which the value of paddy land has risen in the district is very remarkable: we are afraid to quote some of the figures given to us, lest we should be supposed to exaggerate, but we think sales of favorite paddy lands up to some hundreds of rupees per acre have been effected, so that the industry is clearly a profitable one in the locality. Instead of “deserted villages” of the plain, the borders of this great agricultural district have seen villages and population multiplying—“every rood of ground” supporting its man—and

A bold peasantry, their country’s pride
are everywhere in evidence, and they are a contented self-managing people who regard an intruder—a foreigner in their villages,—as (according to their own proverb) equal to a creeper or a parasite to a tree.

BATTICALOA AND THE EASTERN PROVINCE;— IN CONCLUSION.

It is a curious commentary on the recent reference in the morning print, to Sir Henry Ward and his alleged preference for work on minor village tanks, over the restoration of ancient large tanks,—that among the improvements Mr. Elliott is anxious to see carried out in the Batticaloa district, is greater attention to “subsidiary irrigation.” Nor is this a new thing. In his Administration Report for 1883, we find the same Government Agent writing ;—

“Though money has been freely bestowed on the larger works, the distributing channels have apparently had no attention paid to them ; the old native courses have been adopted and the development of new ones left nearly altogether in the hands of the Vauniyas. These men know nothing of levels, and consequently do not always select the best line, though the people are very energetic and willing to spend money to obtain water. To secure this in many places the level of the surface of the fields is reduced several feet, with a loss of course of the best soil which is heaped up in banks. An officer who would devote his time to tracing improved channels, and supervising their opening by the proprietors, and supplied with moderate funds to provide masonry regulating works, would say, in three years do a world of good. Of course he should work in subordination to the Government Agent, and be secured the cordial co-operation of the headmen.”

Again we have the testimony of the same officer in another special report, to the danger of being in too great a hurry for results from large Irrigation Works. Sir Henry Ward and especially Mr. Birch were found fault with for spending so much money on large works which after five years gave

no sign of being remunerative. Indeed it took nearly twenty years to realize the great pecuniary success which first became fully apparent in 1874. At the same time we can quite see the danger of such a precedent; for if twenty years were always allowed, the officers responsible for spending money on big tanks might frequently disappear, and escape the risk of criticism or condemnation if such should have to be meted out.—But it is not alone in minor works that there is room for improvement in Batticaloa. There is great need for extended provision for storage of water. For, it must be remembered that the big tanks of the district are fed by streams which rise in the Uva Province and run full in the wet season. Much of this water still goes to waste and Mr. Elliott has not a few likely schemes to secure extended cultivation in keeping with a growing population, if only the money were available. It must not be supposed therefore, that although so much has been done for irrigation in the Batticaloa district, there is nothing more to do! At this moment, there are skilled officers supervising extensions or improvements including Mr. E. Holland and Mr. A. W. Burnett. The former gentleman was engaged during our visit in the southernmost division of the district in connection with Sagamattu—the most southerly of the chain of tanks which has never been properly finished. It is a curious fact that more than twenty years ago, Mr. Holland's name had secured prominent notice in the Administration Report of Mr. A. Y. Adams for his good work in the same Batticaloa district, in connection with the Rugam Tank. We may well quote as follows:—"Too much praise cannot be given to Mr. Holland, the Superintendent of the Works, for his unremitting

"care, and for the perseverance with which he has overcome the many difficulties with which he has had to contend." This was in 1868 and surely fortune has been rather shabbily towards Mr. Edward Holland, when after a lapse of 22 years we still find him on Eastern Irrigation Works. May his success in the far South at Sagamatu equal that experienced at Bugam and lead to substantial promotion.

It is rather curious to find how something like the eleven years' cycle with breaks at five or six years, seems to govern the prosperity, that is the rainfall, in connection with these Eastern districts as well as with the planting divisions of the island:—1879-80 and again 1889-90 appear to have been times of drought, the prosperous seasons meeting round 1874 and again 1883. We trust 1890-91 season is to make amends, though as yet the rainfall has not been abundant. A great drought was reported in 1866 to have killed a large number of coconut palms. In 1869, the Government Agent was anxious to discourage elephant catching (in 1868 as many as 260 elephants were caught) and hunting among the people, so as to get them to settle down to steady agricultural work.—The want of a market for the large quantity of straw available in the Eastern agricultural districts is very noticeable to those who know what the railway has done for the Western Province in this respect. Burning the straw on the field for manure is the general practice here.

Regarding further improvements in the agriculture of the province, the following extracts from Administration Reports are interesting and suggestive.

Mr. Elliott writes :—

“Of *seed-paddy* there is, I think, much waste. In India usually a bushel suffices to sow an acre, but in the Batticaloa District it varies from one and a-half to three and three-quarters, and in places even four bushels are sown. It is said that the worse the land the more seed is required ; and a Tamil saying, I understand, bids the sower

Remember well, don't scorn to know,
Of every four whene'er you sow.
One's for crab and one's for crow
One to die and one to grow.

“From a recent report (published by the Madras Government) of certain agricultural operations on the estates of a private land-owner, Kumaraswamy Mudaliyar, in Tanjore, I learn that by improved cultivation, and an expenditure of under half a-rupee per acre on manure, a return of thirty-seven bushels per acre was obtained, against twenty from adjoining lands cultivated in the native way, while the profit per acre was thus trebled, viz. R17½ against R5.”

Next to a failure of rain locally as well as over the interior country (Uva) which feeds the principal Eastern Province tanks, the calamity the farmers dread most is murrain among their cattle. Of late years they have suffered much in this way, their stocks of cattle, buffaloes and even (among the Hindus) of pigs being seriously diminished. The experienced Government Agent of the Province is quite clear that visitations of rinderpest or other epidemic disease among native cattle can never be stopped so long as the village headmen have to be trusted to carry out segregation and much more the destruction of affected animals. An Agent or Assistant has usually only one person in his province or district whom he can thoroughly trust to

carry out his orders, and that is himself! What is wanted for the country as a whole in respect of checking cattle disease and improving stock generally is a special Commissioner qualified as a veterinary surgeon and with his heart in his work, to travel all over the country and especially to rush off to wherever murrain is reported and see the stamping-out and segregation processes enforced under his own eye. There is much else such an officer could effect for the people and their stock, and his post might be made self-supporting. If Government could secure the services of Mr. Wm. Smith of Dimbula as Cattle Commissioner, we feel sure that before Sir Arthur Havelock's term of Government is over he would not only justify his office, but make the present administration to be remembered among native cattle-owners all over the island. Considering how greatly the success of agricultural industry and the prosperity of the community in many other ways depend upon cattle (not only for food in milk and meat, but for transport of traffic as well as for field work,) we should not be satisfied until the system of inspection and treatment of cattle throughout the island is made as regular and certain as that of vaccination in the case of human beings, is at present. Mr. Smith has had all the needful experience, being acquainted with the people and island, and enthusiasm in the cause, to give such a system a fair start. What a successful issue in stopping murrain would mean to the people may be judged from the report that in one year 6,000 buffaloes are said to have perished in the Eastern Province; in another year some 2,800 cattle are reported to have perished and so on.

Mr. Elliott reported in 1883 as follows :—

“ *Cattle* and their condition is closely allied to agriculture, and here calls for a passing notice, as a very bad type of murrain passed over the district during the year. It came down the Badulla road and got first into the country immediately to the north of the town, known as E'ravur, where it did immense damage almost entirely amongst buffaloes. When I arrived, its virulence was abating, but it made head again in June and worked down south. Energetic steps were taken to prevent its spreading ; peremptory orders followed up by inspection by my assistants and myself, were issued as to the burying of dead cattle, &c. A number of headmen and owners were fined for non-compliance with the regulations. Disinfectants, and medicines were issued free, accompanied by printed instructions drawn up for me by Dr. Covington, but without their being given more than a passing trial. I made considerable efforts to prevent the disease getting across a sparsely populated tract which intervenes, on the west shore of the lake, between the northern and southern parts of the Districts. For a time these appeared attended with success, but when buffaloes were required to thresh the kalavellamai crop, I have reason to believe some were clandestinely removed from the infected districts. Whether however contagion was conveyed in this manner or, as some alleged, carried through the jungle by stray cattle or the wild pigs, numbers of which succumbed to the disease all through the country, it found its way down south and carried off a very large proportion of the buffaloes, but a comparatively small number of the black cattle.

“ The disease was at its height first in Batticaloa North, and some months after in Batticaloa South, just after the crops had been threshed out, when the buffaloes, by whose aid this operation is carried out,

were thoroughly exhausted from long hours of work and insufficient rest and water. The Kachcheri Mudaliyar informs me that he has long protested against the manner in which the buffaloes are at such times treated, but without success, though he obtained the insertion in the irrigation code of a rule enjoining their proper treatment. I could not obtain an exact return of the number of buffaloes which died, but some conception of the havoc done can be gathered from the fact that the number of buffaloes and black cattle in the District were reported to have been

36,613 and 27,526 on 1st January, 1883 ;

Against 12,815 „ 19,841 „ 1st January 1884.*”

Some time before this,—

“ An interesting return of the cattle in the District was, at Mr. Dawson’s instance, obtained from the head-

* These figures have been sent to me from Batticaloa since I left, and I have had no opportunity of testing their accuracy, while they are not free from the suspicion that an under-estimate of the surviving stock has been made, with an undefined hope of strengthening claims to forbearance in getting in the revenue. It would be interesting to trace the course of this outbreak of murrain. I find notices in the Administration Reports of the existence of foot-and-mouth disease to a moderate extent in Hewagam and Hapitigam Korales of the Western Province, and of a virulent outbreak confined to the Kuruwiti Korale of Sabaragamuwa in 1882. I am not aware whether it got from this to Badulla District, but at the end of 1882 and early in 1883 murrain was very bad in the portion of that District adjoining this Province. It was carried down the line of cart road through a sparsely-populated District, where there are very few cattle, but where the wild pigs were also affected, and I found it established in Batticaloa North on my arrival. From this it spread both ways and worked its way to Laggala in the Matale District and down south right through the Panawa Pattu. I recently met with the disease when travelling in the Magam and Giruwa Pattus, and on enquiry found it had come from Batticaloa to Yala at the end of April one or two cases had appeared at Tangalla.

en, and gave the following result :—

	Black Cattle.	Buffaloes.
Males ...	7,196	3,612
Females ...	10,114	7,469
Calves ...	3,182	1,984
	<hr/>	<hr/>
	20,492*	13,065*
	<hr/>	<hr/>

“The purpose for which kept was stated as follows:—

	Black Cattle.	Buffaloes.
Trampling and ploughing ...	3,924	3,151
Carting ...	1,183	—
Tawalams ...	542	—
Milking ...	2,661	3,002
Manuring paddy land† ...	1,104	502
Manuring other cultivation‡ ...	4,266	1,769

The balance are mostly females left to breed. Cattle especially buffaloes, are very well-off, and flourish in the District, there being an abundant supply of pasture ground lying somewhat away from the cultivated land, where they are allowed to roam until required.”

On our way back to Batticaloa we had the pleasure under the guidance of the Rev. R. Weaver of seeing the Kalmunai Girls' Boarding School, which was about to be inspected by Mr. A. Van Cuylenburg. It was most cheering to see so large a number (about 70) of Tamil girls gathered together in their clean commodious premises for Christian, mental and industrial instruction. Singing and sewing occupy a prominent place in their curriculum, nor are more vigorous exercises neglected, for after some examples of the work

* Previous to the murrain of 1883, the numbers were 27,500 black cattle and 36,000 buffaloes.

† In Marmunai, Eruvil and Porativu.

‡ Chiefly hired by the coconut estates to be tied at the foot of the trees.

done in school, the scholars came outside (it was a pleasant afternoon) and began with skipping ropes, single and double, skipping away after true English fashion! So pleasing a sight in its way as these bright, happy-looking Tamil girls thus disporting themselves in their playground, we had not before seen in Ceylon. We commend the hint about skipping to other girls' schools in the island. In the case of the Kalmunai School the girls are indebted to a kind-hearted coconut planter now in Scotland—Mr. Burns-MacDonald of Glencoe—who bought up all the skipping ropes in Colombo (and had to send home for "more") to supply the school in which he took this pleasant interest and the girls have certainly become with their bare feet, adepts in the inspiring, healthy exercise—so entirely different to anything practised in their secluded Hindu homes. Of course here, as at Batticaloa, Trincomalee and in the Jaffna schools, the girls manage all their domestic concerns—including cooking—for themselves. There is no pampering, but all are taught to become thoroughly useful, active, as well as happy women—the wives of one, and the mothers of a following generation who cannot fail to be better off in this great agricultural district because of the influence of such teaching. The school is not far off the Mission Church—now under renewal—and facing the great westward expanse of fields as if to remind the cultivators of the gathering-point for worship. Would that the latter were all free from superstition and idolatry and ready to come together for Christian worship.

A little farther on we came on the neat little Kalmunai Hospital and the medical officer in charge. How greatly must the people appreciate the

kind and skilful treatment accorded to them irrespective of degree or caste at the hospitals and dispensaries now so common even in the remoter districts of the island. Very different is the feeling of the patients nowadays, from that expressed in the old Tamil proverb that "the medical practitioner who had killed 1,000 patients had only arrived half-way at proficiency in the science of "native medicine"!—A stage farther on, near Kallar, we inspected an Industrial School of an interesting character under the supervision of the native agent of the same (Wesleyan) Mission in which characteristic brass and iron work and carpentry are carried on by skilful workmen who train a number of youngsters. The foundry for brass was after a very primitive fashion, so were the lathes and the instruments used generally; but the work turned out had much to recommend it in the finish as well as patterns. Sir Arthur Gordon took an interest in this school and ordered a free grant of timber for the use of the lads—certainly a most commendable form of endowment.

Before saying farewell to Batticaloa, we had to lecture in the Jubilee Victoria Hall, choosing for our subject "*Duty vs. Interest*," one peculiarly applicable to pushing, ambitious, hard-headed Tamil young men—the Scotchmen of the East. There was a large and most attentive audience; but what struck us most was the intelligent, appropriate way in which, in the absence of the European Missionary, the Tamil gentlemen in whose hands were all the arrangements, managed everything. Better, more concise or appropriate speeches in English, we never heard from any native gentlemen in the Western Province. The remarks of the native pastor of the church and of Mr. Robert

Somanader were specially to the point, and the latter should make a model M. L. C. after Advocate Muttyah has had his turn. It was excusable on the part of so venerable a patriarch as Dr. Covington that he should begin his speech with the days of the first Napoleon, but it was all interesting. Mr. John Carey—the oldest European planter—and Mr. Toussaint, the leading Proctor, also took part. The popularity of the Government Agent, who was in the chair, was well exemplified by the applause which greeted his response to a vote of thanks: “‘what has a Chairman to do,’ asked one Tamil gentleman preparing for the ordeal, of another:—‘Nothing do’ (in Tamil) was the answer.”

Batticaloa wants a Bank Agency established, and Mr. Robert Somanader supplied us with some very encouraging statistics as to the trade and business of the town and district, to lay before Colombo Bankers. The New O. B. C. having an agency at Badulla as well as Nuwara Eliya and Kandy, might well complete the chain across the island with an office for the rich agricultural district in the Far East. The trade in exporting grain to Jaffna, copperah to Negapatam and Calcutta and in a large import trade, ought to make up sufficient business for a bank. Exact figures for imports and exports, can easily be got, but there is a large local and cross-country trade in grain, &c. not so easily gauged. Altogether, the advantage of opening a Bank at Batticaloa is one well-worthy of enquiry. The success of Kalkuda Bay increases the importance of the town; the road to Uva is a first class one; very soon Trincomalee will be equally well-connected by road; and there are numerous district

roads, besides twenty miles of lake ready for steam navigation and a large industry in hucking paddy waiting to be developed. We shall hereafter give reasons why tea culture would probably prove successful alongside the Badulla road about Rugam. Meantime, the Banker should give the matter due consideration. There is, of course, telegraphic communication between Batticaloa and "the balance of creation," and one of the few working telephone lines in the island is that established some years ago between the Custom-house at the Harbour Bar and the Kachcheri. When this was erected, one of the subordinates came very gravely to the Agent to say that now a skilled operative must be got who understood English telegraphing. His astonishment on learning this was unnecessary, because, '*the telephone can speak Tamil*' was very amusing.

FROM BATTICALOA TO BADULLA.

The journey along the great Eastern road from the sea coast at Batticaloa to the heart of the ancient Principality of Uva, albeit performed by bullock cart at the rate of 20 to 24 miles a day, does not offer very much to chronicle. There is the general impression left of the excellence of this comparatively lonely road, running for long distances through unbroken, unoccupied jungle ; of the many well-constructed and even splendid bridges ; of the convenient, well-found resthouses generally situated on some picturesque vantage point, whence at noonday, eventide, or early morning, the outlook over jungle or chena, cultivated fields or mountain scenery was ever attractive ; of the long, steady pull from the lowcountry to Bibile and the still

steeper climb thence up one of the most beautiful of mountain passes in the island to Lunugala. We spent four days on the road so far, through most lovely country, the signs of man being few and far between; and though we heard talk of elephants being troublesome near Rukam and of other "wild beasts" possibly prowling about, we saw nothing stranger than gay jungle-cocks and their modest mates quietly feeding on the roadsides, shyly retreating under jungle shade as we approached, and occasional troupe of monkeys whoo-ooing as they sprang from tree to tree. But it may be as well to run over the trip in a little detail.

Leaving Puliyantivu (the island of tamarinds) in the cool afternoon we were kindly driven the first stage of 10 miles, to Senkaladi. We soon lost sight of the town surrounded and sheltered by an ocean of foliage, but a branch of the lake which it is hoped to cut off from the brackish main portion, ran alongside our road for several miles. I forgot to mention before, how one evening in town was partly devoted to an attempt to hear the farfamed musical shells in the lake opposite the old Dutch Fort. They are supposed to be heard best, like the faint notes of an *Æolian* harp, when the moon is at its full. We had moonlight, but not full moonlight and whether from this cause, or more likely, owing to too great a ripple on the water our mission was unsuccessful—there was no more than the faintest resemblance to the touch of a Jew's harp, heard that evening. The multitude of tiny notes which, at other times, are heard coming up from the water like the gentle thrills of a musical chord, or the vibrations of a glass when the rim is rubbed by a wet finger, did not gratify us that evening and we had to retire with but a very faint idea of the reality.

Looking at the grim old Dutch Fort of Batticaloa as it now stands, it is hard to believe that it was once a scene of so much activity: even in British times it has had its 24 guns mounted and an adequate garrison and we read of the first Governor, Hon. Frederick North, being received in 1802 with a salute of 19 guns and passing through a band of Sepoys. From Batticaloa, too, started Major (then Capt.) Johnston of the 19th Regiment with his 300 brave men (of whom but 80 were Europeans) on that famous though bootless march on Kandy and thence back to Trincomalee, which is among the most remarkable expeditions recorded in the annals of the British Army. Leaving Batticaloa on 20th Sept. 1804, Capt. Johnston though entirely unsupported, and opposed by the Kandians again and again, found his way to Kandy by 6th October, occupied the capital three days, and then left for Trincomalee where he arrived on 19th Oct. notwithstanding every effort of the enemy to block his way, starve him out, or kill off the little Company. The actual loss was 10 British soldiers killed and 6 wounded. The thought of such a march of 300 miles in the present day even of good roads and bridged streams would not be the most pleasant to a modern Captain with 300 men under his care, even if there were no enemy to take into account. But this march was a really marvellous exploit 80 years ago, through unknown tropical mountainous country, full of a most treacherous enemy, and above all without a mile of proper communication, for in Ceylon far more than in the Highlands of Scotland it is a case of,—

“If you had seen these roads before they were made

You would hold up your hands and bless General Wade!

We would strongly recommend young military officers now in Ceylon, interested in their profession, and looking forward possibly to jungle warfare in the not distant future (it may be in the highlands of East Africa or of Burma) to study this march of Captain Johnston*. His own monograph account of the Expedition—a most modest, soldier-like account—we can lend to anyone who cares to study it or go over the ground: Tennent calls it “one of the most thrilling military narratives on record.” Capt. Johnston in starting from Batticaloa had his force conveyed by boats across the lake and thence travelling inland south of the road we are traversing, he made for a point where he hoped to be reinforced by a detachment under Colonel Durnford from Hambantota; but after waiting some days in vain—for he was utterly ignorant of the abandonment by the General Commanding of the plan to have five detachments from Colombo, Trincomalee, Puttalam, Batticaloa and Hambantota, converge on Kandy—he marched on, thinking he would be late. We shall come on the scene of one of his encampments up the road.

For several miles out from Batticaloa, there is continuous cultivation of coconuts. Eravur is chiefly a Moormen village and the centre of much industry. There are extensive coconut plantations along the roadside further on, some only a few years old, belonging to Mr. Atherton I understood. The drier climate, no doubt, prevents such plantations being extended farther into the interior. And yet the splendid gardens of plantains and fields of cassava seen far up the road, shows that there is scope for experiment if not success in large fruit gardens. It was a former resident

* See Appendix, for some references.

at Batticaloa, J. S. Taylor (the brothers Taylor, great writers in their day) who found fault with the Government of the time for not planting up their waste land on their own account. He wrote on one occasion :—

“ I have often thought and said that were our Government a little more wise and thoughtful, means would be taken to cover the major part of the wastelands of Ceylon with not unprofitable plantations, in which work the palmyra would be most valuable, as well as the kitool palms, jak, breadfruit, &c.”

One is apt to forget amidst all the discussion over paddy how large a part fruit and vegetables take in the food of the people. As Cordiner observes :—

“ The coconut, palmyra and jacca-trees may be esteemed the staff of life in Ceylon and a certain resource against the failure of more precarious sustenance. The man who plants any one of these useful trees confers a lasting benefit on himself, and hands down to posterity more certain riches than can be procured in less genial climates by a life of the most toilsome labour.”

Still more perhaps is the Batticaloa district suited for the cultivation of maize or Indian corn, although hitherto these seem to be confined to the Veddas or Sinhalese bordering on Uva ; for Mr. R. Morris in one of his Reports observed :—

“ The Indian corn and Fine grain cultivations in this District are very inconsiderable ; the former is chiefly confined to a first crop off forest in the Irrigation District, intended for conversion into Paddy fields for the following season, and the Fine Grain is principally grown by the Veddas and half-bred Sinhalese inhabitants of the Bintenna, Porativu, and Nadukadu wildernesses, who also cultivate small patches of Indian corn. Both these cultivations have been of fair ordinary quality. The estimated crops for last year have

been respectively 9,866-8½ and 8,772 3¼ bushels."

In 1872, the same officer reported:—

"I have endeavoured to introduce the cultivation of the Suvarkkam Sachcharatum, the yellow cholum, and Queensland maize, from seed kindly supplied to me by Mr. Robertson, Superintendent of the Government farms at Sydapet, but have had difficulty in overcoming the conservative habits of the natives. Enough has been done however to prove that all these grains would thrive here. The Suvarkkam Sachcharatum is especially valuable on account of the superior fodder it yields for cattle. One great cause of the inferiority of native cattle is undoubtedly the insufficient food they are able to pick up during half the year. It is useless to attempt to persuade the people to take the trouble to cultivate solely for fodder but, by introducing a grain fit for food, the stalks of which are useful as fodder, there are some hopes of undermining their prejudices in time."

That experiments in improved cultivation have not been wanting we gather from the Reports of twelve years later by Mr. Fisher in 1886 and from Mr. Bailey's Administration Report 1887:—

"In addition to rice, kurakkan, and Indian corn, large quantities of plantains and manioca are grown on the chenas in the interior, and form an important item in the food supply of the people. It is estimated that there was an outturn of 15,000 cwt. of the cassava root which was sold at about R1.12 per cwt. The quantity of plantains put into the market is not easily estimated; but they form a very considerable item in the dietary of the poorer classes. Fish forms another and very extensively used article of diet. It is mostly eaten fresh, and little is locally salted and cured, except by the Sinhalese fishermen, who resort from other parts of the island to the deep-sea fishing grounds on the coast. Sea-fishing is scarcely practised by the natives"

of province, the shallow lagoons and backwaters affording an abundant though inferior supply of fish for local requirements. Very little garden produce of any kind is raised, and for this reason the failure of the paddy crops must always be productive of great hardship to the poorer classes, who have nothing to fall back upon when the supply of rice fails. The cultivation of breadfruit and jakfruit has been scarcely attempted, and the growth of vegetables is almost entirely neglected. These remarks apply more particularly to the Batticaloa district, but the circumstances of the Trincomalee district are very similar.

“Kurakkan, Indian corn, and manioc (cassava) were largely grown on chenas, and added considerably to the food supply. The quantities of grain produced as reported by the headmen were: paddy 625,869 bushels, Kurakkan and Indian corn 12,659 bushels.”

Two more extracts from past Reports on this stretch of country and we have done: one is by Mr. Hume referring to the capture of elephants:—

“An odd peculiarity with these animals, which I have not seen noticed is, that on each wild animal captured a large swelling or enlargement of the skin, apparently, forms like a bag on the lower part of the abdomen. This gradually subsides, and as they become tame, goes off. The native panikkans or hunters say it occurs with every elephant captured.”

Another by Mr. Moir in 1876 has to do with a timber which no doubt the forest officers have since brought fully into notice.—

“It is singular that there is no demand for rana wood. The tree abounds in this district, the timber is easily worked, and is of a kind that I had fancied was suitable for casks. There is so much of the wood available, its felling and transport could be so much more easily and cheaply effected than is the case with the harder woods, satin and palai, whilst halmilla is

with difficulty procurable, that I think it would profit Government to endeavour to make this sort of wood better known than it is in the places where casks are made for the transport of coffee and coconut oil."

Still the great want along the Batticaloa road, after leaving the coconut and rice region up to Bibile (some 60 miles) seems to be population. So far back as 1867, Mr. Birch discussing the need of settlers in the Eastern Province write:—

"Above all I should like to form a Jaffna Colony, and if liberal terms are offered, I believe, we ought successfully to do so."

Along this metaled road as along every main road in the country, there are here and there settlements of Tamils—but chiefly of cooly immigrants from India—whose main occupation is breaking metal and the road maintenance, supervised by Jaffna overseers. Our stages along the road were as follows:—

	<i>From Batticaloa.</i>	<i>Miles.</i>
Sat. 23rd	Sengaladi (Evening)	10
Sun. 24th	Tumbalancholai a. m.	14
Sun. 24th	Mahaya p. m.	12½
Mon. 25th	Kaloda'	10½
Mon. 25th	Ekiriya kumbura	10
Tues. 26th	Bibile	11
Tues. 26th	Lunugala	12

Everything looked green and pleasant in the neighbourhood of Rukam tank (20 miles from Batticaloa) which had sufficient water to glisten in the sun. Farther on we came on splendid expanses of land, some under cultivation with cassava and plantains, and nothing will make me believe that there is not room for a large and valuable extension of planting cultivation alongside this Batticaloa road. Seeing what tea is doing

even under prolonged droughts, and moreover realizing that profitable crops can be gathered in six months, even should the rest be flushless, I think experimental tea clearings between Toombelancholai and Bibile well worth trying, while of course from Bibile up to Lunugala there ought to be far less risk. No doubt, the trouble would be to tide the young plants over the dry season, but with rich soil and judicious shading this might be managed. What drought means sometimes in the East may be judged from the following extract from an Administration Report :—

“ Wild beasts appeared to have suffered much, cheetahs and bears were constantly seen in and near villages, and one gentleman tells a story which gives a very vivid idea of the drought prevailing in the District. He relates, that whilst at work in the jungle, he was obliged to carry water for miles from his head quarters. One day he and his cooly were pursued by two bears. The cooly was carrying two chatties of water, and on perceiving the bears behind him, he placed the two chatties on the ground and ran; the bears as soon as they came to the chatties, drank the water and went away.”

At Ekiriyankumbura, we are at the station where Capt. Johnston and his gallant band rested two days hoping to be joined by Colonel Maddison from Hambantota, but seeing or hearing nothing of him, he pushed on Northwards via Alutgama and Medamahanuwara to Kandy. The resthouse here is 480 feet above the sea, while by the time we have got to Bibile 11 miles farther on we are 800 feet. This is an interesting point at the foot of the Madulsima range and the entrance to the Bintenna country with hot springs and successful irrigation works in the neighbourhood. Here are stores for the rice and produce of some of the

estates and at intervals all along our course we have met or passed bullock carts generally well laden and as a rule with splendid looking well-conditioned Indian draught bullocks. There is evidently a good deal of traffic between Lunugala and the East Coast and the question is how far will the railway,—not at Haputale, but at Bandarawela, with a cartroad on a good gradient thence to Passara—divert this traffic.

This is a problem which Sir Arthur Havelock will have to consider at an early date; but to enable him to do so, he must visit Uva again with the object of seeing somewhat more of the Badulla division by the estates at the back of Namunakulakanda, around Passara, and thence on and beyond Lunugala. His Excellency can be promised an interesting trip in this direction as well as to the Eastern Province by the route we traversed. From our experience in coming up the long winding and picturesque Lunugala Pass—a climb of some 1,400 feet—we can imagine how grand must be the prospect in favourable weather to the traveller wending his way down this shady road to the music of a highland stream occasionally broken by cataract and waterfall—one such waterfall being among the most beautiful we have seen in Ceylon. At Lunugala, His Excellency (some day in the near future) will be but at the beginning of the Madulsima district, a full account of which as well as of the Badulla ranges' plantations, he will find in our pamphlet on the inauguration of the Uva Province. But here he will see under Mr. Fanshawe's care some very successful tea and cacao cultivation, and in travelling thence to Passara, we were delighted

some months ago with the appearance of Yapame tea fields, and with the clearings of various other estates—Kehelwatte, Gallabodde, Meyampah-oya, Hanipha, Muttote, Letchemawatte.

PASSARA AND BADULLA.

There is no prettier resthouse in the country for situation and surroundings than that of Passara twelve miles from Badulla, elevation 2,920 feet above sea-level. It is verandahs are embowered in roses and creepers and the outlook is unusually varied. The grand mountain range in front has given some of the heaviest coffee crops even borne in Ceylon, for the princely estate of Gonakelle is close by with the certainty that it is to give its fortunate proprietors as handsome returns from tea as ever it yield in coffee; and just over the shoulder is Mousagalle which even now goes on giving good crops of coffee to Mr. C. B. Smith. On Gonakelly we found Mr. MacInnes (whose own fine property of Heathstock is not far away) giving the finishing touches to the grandly complete Tea Factory, after the model I believe, of that of Nayabedde—both being as well planned and fitted up as any in the country; and the estate Manager, Mr. J. J. Robinson, very proud as well he might be of his field of tea, especially that on "virgin" patana yielding even now up to 600 lb. of tea per acre. A journey over the present cart road between Badulla and Passara will easily show the Governor the absolute necessity of a new and level route at the back of the range if the railway is to profit by the extensive cultivation between Passara and Hewa Eliya. Six miles up and six miles down into the valley of Badulla bring us to the town engirdled by palms and other fruit and flowering

trees and now we are only 2,200 feet above the sea, but still His Excellency will here be 500 feet higher than in his "Pavilion" at Kandy. Of course the Governor will have reached the capital of Uva from another direction by way of Hakgala, Wilson's Bungalow, Attampitiya, and Debedde. And sure we are that when on Monday afternoon, Sir Arthur Havelock sees for the first time the seat of the ancient Principality, he will be ready to give it the palm as "the prettiest town" he has yet seen in Ceylon. Premising that in the past four years, great improvements (to which we shall refer in our next issue) have been effected, here are a few passages from our description of Badulla on the occasion of Sir Arthur Gordon's Proclamation of the Province in 1886 :—

"From whatever side it may be approached, Badulla presents a strikingly interesting and pretty appearance. It nestles in a well-wooded hollow backed by the giant, Namunakula range, with a cloud-capped peak, forest or coffee-clad hillsides, and every variety of feature as background and sides to the picture; but in another direction. Badulla, from its "Judge's Hill" and Fort ramparts, looks down upon lowcountry well-cultivated in field and garden. In respect of its grassy boulevards and charming little fort, Badulla is unique among Ceylon towns: it most resembles Kandy, but is far cooler, because better shaded and higher. Even in the bazaars there is the relief of some shrubbery or lofty umbrageous trees for the eye to rest upon, while the bungalows are all well-shaded. In the town itself, the chief difference to my memory in fourteen years lay in the greater number of residences, big and small, indicating an increase of business and prosperity as well as of population. Governor was not prepared for so large a town. The presence of two Banks, two large European stores, the Uva Ironworks and a Club, though the last is still in

its infancy, indicates progress and enterprize in the capital of Uva. The "Bank of Uva" as well as a Bank of the New O. B. O. Messrs. Walker & Greig's Badulla establishment, a very full machine manufactory. The one want within the circuit of Badulla from a scenic point of view to make it equal if not exceed Kandy in picturesqueness is a lake or even tank ; the constant playing of a handsome fountain, however, opposite the principal "boulevard" has a very pleasant effect and betokens the good and ample water-supply of the town. Much of the effect associated with the laying out of the town is attributed to Mr. Sharpe who held the Assistant Agency of Badulla for a longer period than any other officer of Government; but no doubt the primary credit is to be given to the military officers who (like Major Rogers) combined civil and military duties in the early days and to whose fine taste, and unlimited command of labour with autocratic power, so many Ceylon towns both in the hill and lowcountry owe their first start on the way to sanitary order and picturesque arrangement of streets and principal buildings."

No doubt there will be a great concourse on Monday next, to see the new Governor on his first visit—albeit a very short one, and here is how Badulla looked when full in 1886 :—

"No town in Ceylon lends itself more to picturesque effects from a large assemblage of natives than Badulla, the future capital of the Uva Province, and when you remember that this was not an ordinary but rather an unprecedented gathering, and that, besides thousands of Kandians and Tamil coolies, men, women and children, in their variety and parti-colored garment, we had hundreds of Buddhist priests, of Chiefs of all grades from Ratamahatmayas, Basnayaka Nilames to Arachchies and Lekamas, of Moormen with casque-headdress, of Hindus, including several Shroffs—of all classes and conditions peculiar to Ceylon, spread along

he roads and face, ramparts, banks and the new dry and grassy moat of the Fort, waiting for the arrival of the Rajah, I think you will admit, we had the elements of an eminently interesting and gay Oriental display.

Since then, Mr. King but especially Mr. Fisher, Dr. Trimen, Mr. Noek and Mr. E. Creasy have had much to do with improving the town.

BADULLA: THE CAPITAL OF UVA.

THE GOVERNOR'S VISIT.

Sir Arthur Havelock, as we have said, will, we feel sure, be delighted today (January 26th, 1891) with the beauty of the capital of Uva and its surroundings. The clean shady streets, the picturesque old Fort, the tree-embowered and lawn-surrounded Residency, the outlook along the far-extending Badulla valley, and still more up the sides of towering Namuna-kulakanda. The Experimental and Ornamental Gardens, too, cannot fail to have a word of commendation, albeit they are still in their infancy, and Mr. Noek would say how much more could be done, were there money to spare even on the five acres allotted to them; and again the adjacent race-course, described as the finest for situation, and of its size the most convenient of any in the island, with a handsome permanent grand stand. In the old Cemetery, in the centre of the town, there are some particularly interesting memorial tombstones of British military and civil officers and their wives* who died here in the very early days, and the grave and dedication stone which the bo-tree has carried away up

* Among these are Mrs. Nicholson and Mrs. Wilson, the wife of the Assistant Agent who fell a victim to the rebels in Oct. 1817.

among its branches will be especially noted. The little Memorial Church was erected by the Kandyan Chiefs and minor Headmen as a token of their affection and respect for Major Roger who so long administered the district, and was killed by lightning at Haputale Pass. The following reference to this distinguished Rifle and Administrative officer is from "Major Skinner's Life" just published:—

"A supplementary return of officers for purchase was instantly prepared and submitted, but not in time to catch the ship, whose departure for England was earlier than the Governor supposed.

"The consequence of this failure, by an hour or two, in the despatch of the regimental return of my name for purchase, lost me nearly nine years rank as a captain.

"My friend Rogers got the step. I never regretted it, or envied him his good fortune. We—*i.e.* his brother officers and friends—were very fond and *justly* proud of him. A nobler fellow, a finer soldier, or a truer friend could hardly be imagined. Sir Robert Wilmot Horton, Sir Edward Barnes's successor in the Government, who had seen as much of life as a very large experience of European society could afford, was one day speculating on what would be the effect of the possibility of beginning life anew, with his matured knowledge of the world, and the privilege of personating any character he had met with in life. He was himself a most able and accomplished man, and it seemed strange that his self-esteem could admit of his preferring any character to his own; but, to our surprise, he declared that if it were possible to adopt another's identity, that Captain Rogers was the one he would select of all the men he had ever known. This was a grand compliment, and as high a tribute to the merit of my friend as one man could pay another.

"This splendid fellow, Rogers, was struck dead by lightning on the Hapootella Pass on the 8th June 1845. At the time of his death, he was performing, *most efficiently*, and to the entire satisfaction of the Government and public, the offices of Government Agent of the district of Ouvah, District Judge, Commandant of the District, and was also my assistant in charge of the roads of that province—duties which, after his death, required four men to perform, with far less efficiency, promptitude, and punctuality than when they were administered by him alone.

"He was also a keen and successful sportsman, and had bagged more elephants than any man in Ceylon; I cannot state with accuracy the number, but am under the impression it was about fifteen hundred.

"The Kandian population of the Ouvah district—all Buddhists—paid the highest compliment in their power to their late energetic chief, by erecting, to his memory, a pretty little Christian church in the town of Badulla, the metropolis of the district. It has always appeared to me very beautiful, that their love and regard for Captain Rogers should have been so great as to overcome their religious scruples."

Badulla and Uva so far behind the rest of the Central and Western portion of the island in respect of educational and indeed evangelical work, has entered on a new era of progress in both respects since the Rev. S. Langdon—"the apostle of Uva"—established his Mission and schools—Industrial and Reformatory—in the centre of the villages filling so many valleys in the Uva Amphitheatre. In Badulla town itself there is a most interesting branch of the work in the Orphanage and Schools and itinerating operations, directed by or under the care of Misses Cook, Lord and Cotton. A visit to the Orphanage—a little

way out of Badulla cannot fail to reward any visitors at all interested in thoroughly commendable philanthropic, educational and Christian work. From our short visit we could see that the ladies were admirably adapted to their duties and in love with Uva and its people; while no more potent means could be devised of dispelling the dark cloud of ignorance which envelopes the Kandyan in remote Uva, than by taking the little ones early in hand and training up the daughters and sisters—the future mothers—of the people in the new, industrious, honest, “enlightened and altogether better way in which this institution is sure to lead them. No one can do otherwise than wish Godspeed to the Badulla Native Orphanage and schools—to schools everywhere and of every degree, Anglican as well as Wesleyan, in this neglected and benighted province.

The Governor will, of course, take notice of the ornamental, as well as useful, Badulla Market buildings, and the palatial new Hospital which most people think to be designed after an extravagant and wasteful fashion—the cost being far better divided among two or three modest buildings at different points in the province. The Gaol and Police Headquarters will be duly inspected, and will, we feel sure, give due satisfaction.

FROM BADULLA TO BANDARAWELA.

H. E. THE GOVERNOR ON TOUR.

On the afternoon of January 27th, 1891, the Governor drove from Badulla to Bandarawela. The journey is one of 18 miles, some portions of the road being very steep, for the rise altogether is from 2,200 feet to

4,105 feet above sea level at the pleasantly situated Bandarawela resthouse. The first part of the road is level, and a climb of nearly 2,000 feet in practically less than 14 miles during an afternoon drive makes a wonderful difference in climate as the Governor will have realized. Along the first part of the road out of Badulla, Sir Arthur Havelock will see many evidences of "coffee" not being dead in Uva, through the flourishing native gardens and little roadside patches still cultivated. Oodoowerre estate on the roadside, one of the first opened in Uva and full of memories of early pioneers, is but a shadow of its former greatness.* Our own recollection goes back to March 1864 when after accompanying the Haputale planters† to Kaluphanna to meet Sir Hercules Robinson, we afterwards went the round of the district, passing a night at Oodoowerre bungalow (James Irvine, manager) before going up to Spring Valley. The coffee was then in full vigour. Now, cacao and some cinchona and Liberian coffee were the products which met our eye on our journey up the road in September last. At the 8th mile from Badulla, we also came on a little cinchona estate near Kalmodara village where the tavalam or travellers' path leads off to Passara. Young native coffee was next noted and also some old abandoned patches, but it must be confessed that this Bandarawela road climbing up with steep patanas on each side is a rather monotonous uninteresting one, unless we look back and enjoy the grand range of mountains towering

* Sir Henry Ward in 1858 described the young coffee on Oodoowerra estate, which spans the high road three miles from Badulla on this side, as the finest he had seen in the island.

† The only persons then present who remain now in Ceylon are Mr. Macphail and the writer.

over Badulla and Spring Valley with the summit of Namunakulakanda far up in the clouds, until we are inclined to think of it as

the monarch of mountains ;
We crowned him long ago—

Another interest is roused however as we come on evidences of the new road to Ella, no doubt now much further advanced than it was five months ago and shewing where the traffic of a good many East Haputale*, Badulla, and we trust Passara and Madulsima estates will find its way to and from the railway terminus which, if brought to Bandarawela, will be close at hand. The village of Bandarawela has some importance in itself ; but it must become a very different place by and bye under railway influences, although the grand thing about a railway terminus in a well-chosen spot in this neighbourhood, is that there is so wide an expanse of Crown patanas with a glorious climate for the future town—perhaps capital of the province. We found tea, coffee and cinchona all occupying the attention of the villagers, and planting operations were by no means neglected. The new resthouse at Bandarawela is situated in a very delightful position, commanding a splendid view over the country and in a climate and surrounded by an atmosphere that can only be compared to champagne, so exhilarating are its effects ! We speak of the “ new ” resthouse and yet it has been built thirteen years. Our experience of the old one was not gained in 1864, but in 1872 when in company with an estate “ Visiting Agent ” (“ Old Colonist ”) and a Colombo merchant a brother of Capt. Donnan, then partner in the

* The road to Koslanda strikes off here.

leading house of O. Shand & Co.), we made the round of Rakwana (our trip commenced at Galle through Morawaka), Balangoda, Haputale, Badulla to Cannaverella and on to Nuwara Eliya and Dimbula. We arrived late in the afternoon from the Eastern end of Haputale riding up the estates and over the patanas to Bandarawela resthouse, hungry and tired; but there was nothing to be got for an hour or so, and even then only very poor tough "moorgie" curried or stewed with pepper-water; and the grand scenery and climate had to afford compensation. As we lay on the grass facing the sunset over Totapala, we talked softly but earnestly of the day when a railway locomotive would be seen entering Uva and the writer then and there first formed the resolution to take up the question of "Railway Extension from Nawalapitiya to Uva," to leave no stone unturned to get the planters and natives to unite by memorial and petition until the Government were moved. What has happened since, during these long tedious eighteen years is a matter of history. But it is a kind of "poetic justice" that the railway should be completed next year not simply to Haputale Pass, but on to the neighbourhood of the "classic ground" (1) facing the old Bandarawela resthouse.

It is interesting to refer to such reminiscences of the past and at this time there is special interest in quoting from a letter of the "merchant" (of the party of three) now in Belfast addressed to the "planter," now in Aberdeen, a few months ago:—

"I often think of that very pleasant ride which we three had 18 years ago and I can well recollect how enthusiastically impressed Ferguson was with the Bandarawela district and how energetically he followed up the subject of railway extension in his paper and

he most wonderful thing is that even after the lapse of 18 years it should now be actually accomplished considering the time that Ceylon has passed through in the interval. Nothing could give me greater pleasure than to return to the land of our "dreams" and to find them realities, but I cannot yet see my way, but who knows?"

Referring to what we said of Bandarawela and the neighbourhood in 1872 we quote as follows:—

BANDARAWELA:—This village is distant 118 miles from Colombo on the Ratnapura and Badgalla road and 18 miles from the latter town. Situated at an elevation of 3,800 feet above sea level, it stands within easy reach of the highest portion of the Happotella range which rises 2,000 feet more. It is the centre of a considerable extent of native cultivation and a walk over the undulating patenas in the neighbourhood enabled us more fully to understand the high appreciation which has always been felt of the climate in this portion of Ouvah. Sir Hercules Robinson is said to have expressed in high terms his praise of the climate, of the beauty of the open prospect towards Hakgalla, Oodapusilawa and Naminacooly from some of the knolls near the spot and of the splendid sites with "ample room and verge enough," afforded for residences in the neighbourhood. Remember that with the drier and more equable climate of Ouvah, an elevation of 3,800 feet in the midst of open grassy uplands is very different on this side from what it is on the other side of the Newera Ellia mountains. We felt all the coolness and exuberance of spirit here which are usually felt (*on a fine day*) on the Lindoolas in Dimboola or the Bogawantalawa in Dickoya at an elevation over a thousand feet higher. When the Railway traverses Ouvah, there will be few spots which will be visited with greater pleasure by troops of holiday seekers from Colombo, and perhaps by more permanent visitors, than the fine expanse of country be-

tween Wilson's Bungalow and Bandarawella. The attractions offered by grassy hills and dales varied by highly cultivated valleys and picturesque Kandian villages by gently meandering streams and roaring torrents, and even by considerable pools of lakes (frequented by snipe and bittern, as the neighbouring copse is by the timid hare) will all be found here in abundance. After disturbing both hare and snipe in the course of our afternoon walk, as we stretched ourselves on the velvety grass and looked sunward towards the now crimsoned peaks of Kirigalpotta and Totapella, who could blame us for thinking of the future and talking to each other softly of the hope of revisiting the place in the railway era to come.

Tomorrow, the Governor and suite will pass up the road to Haputale and come on more interesting, because occupied and cultivated country, before crossing over to Wilson's Bungalow.

FROM BANDARAWELA TO HAPUTALE.

H. E. GOVERNOR HAVELOCK ON TOUR.

On February 28, 1891, Governor Havelock will have driven from the Bandarawela resthouse (4,105 feet above sea level) to the Haputale Pass (4,600 feet), the present accepted terminus of the Railway Extension. No doubt Sir Arthur Havelock had a good look at the suitable sites for a railway terminus near Bandarawela, in the event of this section being completed—as everybody hopes—along with the Haputale division next year. His Excellency too may have had the probable line of trace through the crown patanas pointed out to him. In any case, the railway must occupy a good deal of the vice-regal thoughts; and yet the beauty and delight of today's journey over the uplands of Uva and through the finest coffee in the island, is quite enough to

occupy attention. For, the Governor will pass through, or in close proximity to, some of the most valuable plantations in the whole of our planting districts. He will see how well even on old Kahagalla—opened well-nigh 50 years ago,—coffee keeps up; while on Gonamotava—the first clearing on which we saw planted in 1864—there is as fine vigorous coffee as could be desired. So with Boekhampton and to some extent old Haputale, both on the roadside, though in the latter case, the new staple tea is rapidly superseding the old one, coffee. The pity is that the Governor did not see the grand show of coffee blossom in this region a few months ago when all the fields were covered with white as from a fall of snow. But the crop of berries now following on the blossom is even a more pleasing as well as substantial sight. It is quite cheering to learn that old Haputale planters—like Mr. Orchard of Wiharegalla—believe that there is a distinct revival of coffee all over the district. If the Governor were able to visit Nayabedde estate, which in any case, will no doubt, be pointed out to him during his drive, he would there see promise of as rich coffee and tea harvests as any estate proprietor could desire. There is not the slightest reason therefore to doubt that there will be ample traffic—up to estimates—for the railway and that the whole line from Haputale to Nawalapitiya will be the profitable one with the Uva produce, which we have always said it must be, care being taken to credit all the profit due to the *new traffic* which such line will bring on the main line. If this were indeed all credited to the Haputale section alone, as it might be, the Uva branch would be the most profitable in the island. There is also the fine property of Craig

visible in the same neighbourhood. On old Haputale, Mr. Lloyd if he has the opportunity, can show the Governor a field which, after 50 years in coffee—the jubilee field—is now looking flourishing in tea.

*HAPUTALE: "HAPPY VALLEY" AND
THE RAILWAY.*

GOVERNOR HAVELOCK ON TOUR.

At Haputale Pass, the Governor will have stood on one of the grandest vantage-points in the island for an extensive lowcountry view. To mark the salt-pans at Hambantota glistening in the sun is no uncommon experience. Have not Haputale planters indeed noted the smoke or the rigging of a passing steamer? At any rate, we know as a fact that the Basses Light has been seen again and again much farther inland, namely on Goatfell estate on the borders of Udapussellawa and Nuwara Eliya districts. The Haputale Pass looks very different now to what it did 27 years ago at the time of Sir Hercules Robinson's first visit. With waving forest on each side,—

A pillar'd shade

High over-arch'd, and echoing walks between,
the ride up or down the Pass with peeps at cultivated plantations in pristine vigour, at the lowcountry and the coast, was a very great treat in those days of old. Now the forest is gone all the way from Haldummulla to Haputale, and indeed the only bit of forest belonging to the Crown in the whole district consists of some 50 acres just above the Pass on which the Forest Department has begun to try its hands by way of experiment. The

extraordinary thing to most of the planters is that instead of meddling with this forest by cutting out and trying clearings of new trees, our Foresters do not first go in for an experiment on a really considerable and satisfactory scale in tree-growing on the patanas. The Governor has no doubt had pointed out to him the little clearing of timber trees outside Badulla and near the Judge's quarters; and there is the marked success of Mr. A. J. Kellow at Albion, New Galway, his belts of *Acacia decurrens* being landmarks as far as off as Namunakulakanda. But considering the hundreds of thousands of acres of patana land which the Government own in the uplands of Uva, in a splendid climate; the vast importance of the Crown leading the way in a really worthy afforestation experiment must be very apparent. Sir Arthur Havelock ought to ask "the reason why" this has not been done. For, there is no question that timber and fuel supply will shortly become a very serious one in Uva. No doubt His Excellency will have heard somewhat of this. He will also learn how well fitted the soil and climate are for fruit trees: how the pear trees at Roehampton have been loaded this season with really excellent fruit, the fact being that there is scarcely anything agricultural or horticultural which cannot be grown in favoured Uva. One evidence of the suitable climate and soil for the finest and most delicate of teas is found in "Munipuri indigenous" plants—usually confined to low or medium districts—flourishing exceedingly on Leangawella at 4,500 to 5,000 feet above sea level. The Haputale planters are rather sore about the palatial hospital at Badulla and wonder why part of so big a vote was not given to serve the hospital requirements of other divisions of the

province. At the Pass the extensive Stores and Engineering Establishment of Messrs. Walker & Greig give evidence of life and business, Mr. Allsup being now one of the oldest residents in the district, while we found Mr. Stewart in September busy over designs and work for tea factories far and near. The little Church in its quiet corner, and the wayside Post Office give finish to the little town which will ere long have new life thrown into it by daily railway trains. No doubt, the Governor will have been fully informed at Badulla and on his further journeying about the new and connecting roads which the railway will make necessary for Eastern Haputale and the project for a wire tramway to work between Haldummulla or the Berragalla road junctions and the line. This latter would effect a great saving of time and labour if it could be economically constructed and worked.

HAPPY VALLEY MISSION AND INDUSTRIAL SCHOOL

It does not appear that the Governor in this time, to turn aside from the Haputale Pass to have a look at the "Happy Valley" Mission Establishment--the Industrial School and Workshops ; the Reformatory and its cultivated gardens, fields and plantations. But His Excellency cannot fail to see them in the distance during his journey to and from the Pass. Our own visit in September last to this centre of work, faith and hope for Uva, was intensely interesting. There can be no question of the reality of the work as regards the "city Arabs" located here in one of the finest climates in the world, taught and trained and drilled after the most methodical fashion ; and it will not be the fault of the Superintendent (the Rev. H. S.

Sandford) and staff, especially of Mr. Braithwaite, if these boys chiefly from Colombo and the low-country do not become very useful members of society hereafter with a plain education, but a good practical knowledge as farriers or smiths, carpenters, shoemakers, gardeners, cultivators of fields, &c. A shoemaker instructor and an agricultural instructor are on the staff, as also a medical assistant who visits the native villages for many miles round, and finds much need for his services. Mr. and Mrs. Braithwaite, with the aid of the Reformatory lads are likely to have "a model farm" to show the Governor when His Excellency does go their way, with a good dairy, poultry yard, piggery, fields of vegetables and corn—perhaps some paddy—besides coffee, tea, cinchona and no doubt timber trees. All this on the patanas in the centre of the grand Uva amphitheatre spreading from New Galway to Badulla and from Udapussellawa to Haputale. So splendid a field for stimulating material progress, for philanthropic as well as Christian work does not exist in Ceylon, and the last and most important part of this work is not forgotten. The missionary has his regular services and Mr. and Mrs. Braithwaite itinerate with much acceptance, for though they know little of the language as yet, their evident earnestness and desire for their good, requires no interpreter to the hearts of the poor ignorant men and women in the secluded Kandyan villages which occupy so many valleys hereabouts. Sewing classes for the women with simple Bible instruction are working a revolution in their habits as well as thoughts, for that "cleanliness is next to godliness" is wonderfully true. One little illustration of how the hearts even of densely ignorant Uva natives

may be touched : Mr. Braithwaite was waited on by a poor old villager who had seen and heard him on one of his tours, and his message to the kind good Yorkshireman, was:—"I have come " to ask you where *your* God is, that I may go and " take a present to him"! Mr. Braithwaite was busy ploughing the morning we were there, while his reformatory lads were fencing, hoeing, digging, weeding all round. The promise of a good fruit garden; the commodious buildings for their several purposes, all built by himself; and the 1½ acre paddy field which had yielded 40 bushels (8-fold) of crop for a first trial, each and all excited interest.

We need say no more here. Those who want to have further particulars, we can now refer to the story of the Happy Valley Mission by the Rev. S. Langdon just published in London—an interesting as well as attractive little book—full of illustrations with a little map of Ceylon in which Uva is clearly marked out. Good to Uva cannot fail to result from this publication.

Crossing over from Bandarawela to Welimada, *en route* to Wilson's Bungalow, the Governor left "Happy Valley" on his left, while he also travelled parallel to the new line of Railway.

THE HAPUTALE RAILWAY

EXTENSION LINE:

FROM HAPUTALE UPWARDS.

Our information by telegraph and through correspondents from Haputale showed us that the

Governor remained long enough there to enjoy the glorious outlook over the lowcountry towards the seacoast from the top of the Pass. Nor could His Excellency fail to mark the grand view inland, over the Uva amphitheatre bounded by Namunakula, Narangala, with peeps of the far-off Madulima hills, and the main Udapussellawa and Kandapola ranges, with Hakga'a flanking the bold central mountain mass running to Totapala and along whose side the new railway track is rapidly being scored out. It may not seem very natural to connect missionary, educational and reformatory work with the railway; but in reality there is a very close sympathy; for missionaries and educators here as in India confess that the railway has done more to waken and brighten up the natives, to destroy ignorance and superstition and weaken the bonds of caste, than any other agency. In this respect we expect great things in Uva through the opening of the Railway. In discanting as we have done on the work in schools and missions to the Sinhalese, we should not forget the Mission to the Tamils represented in Uva by Mr. Horsley whose station, the viceregal party will have noted as they have travelled up the road. Mr. Horsley is unfortunately to be removed from Uva where as well as, in far-off Sabaragamuwa he has worked so long; but we trust the Tamil Cooly Mission will be able to send a worthy successor.

But now we enter on the Railway Extension works, a small portion of which was visited and inspected by the Governor. To get a clear understanding of the whole work, over which His Excellency is to pass a few weeks hence, it may be as well to mention that from Nanuoya to Haputale there are $24\frac{1}{2}$ miles under construction,

and that these miles include such continuous heavy work in cuttings, embankments, culverts, viaducts, tunnels, &c., as render the section one of the most important undertakings for its length ever taken up in the East. In other respects this Extension may be said to be unique. For a combination of tropical upland, mountainous and lowland, pastoral and wooded scenery, for a succession of deep gorges and high mountain peaks with streams dashing along in cataract, waterfall or quiet pool like stretches, there will be few railway drives on the world to compare with the Uva line. In the construction of this Extension line, the main responsibility rests on Mr. F. J. Waring, Chief Resident Engineer (Sir C. H. Gregory being Consulting Engineer), and the line is divided into two principal sections, the Nanuoya-to-Summit division under the care of Mr. H. Oliver as Chief Assistant, and the Haputale-to-Summit division under Chief Assistant Mr. Mackintosh. These gentlemen again have a staff of Assistants under them in whose care is placed the direct supervision of from three to five miles according to the nature of the works; contractors being employed as far as possible for all cuttings, embankments, sidelong rock blasting, and even some of the masonry as well as the ballasting, &c., while each tunnel has its own staff of European foremen, miners, &c., and the big viaducts are also under special care—Mr. T. R. Walker being contractor for one of the largest in Mr. Oliver's division. Altogether we believe, there are some 5,000 natives of all races and degrees—artificers and labourers—employed on the line, and among them a good many Sinhalese as well as Moormen,

although, of course, Tamils and especially immigrants make up the larger proportion

With these few general prefatory remarks we may now turn to the Haputale Division, and begin at the beginning with the three miles of railway here which were originally given as a contract to Mr. J. C. Courtney, but afterwards taken over from him by Capt. Williams. This is the portion that was visited by the Governor on Wednesday last, and where His Excellency met Mr. LeLievre of Mr. Waring's headquarter staff and the Messrs. Craig and Church, assistants to Mr. Mackintosh, as well as the gallant Contractor who has had a varied career from the "Indian Mutiny" days onwards in the East. The first part of the line starting from what will be the Haputale station is comparatively easy. Then comes a big bank, on which on the morning we passed, Capt. Williams and a swarm of coolies with tilting hand waggons were very busy. There was a big cutting to correspond to the bank, and the usual proportion of culverts, to be got over, before we passed to Mr. Mayow's contract. The assistant Engineer-in-charge, Mr. Craig, has his bungalow perched right over this section of the line, so that he is able to drop down very quickly to any point. There is a good deal of riding up and down and along the line also necessary for him and his chief Mr. Mackintosh. We found that Mr. Mayow had been doing some heavy work in culverts, deviation, cuttings, &c. As an old hard-working planter, Mr. Mayow as well as his coolies had become greatly interested in their work, and very diversified and extremely interesting it must be to see order gradually brought out of chaos—and such a chaos in some parts, as an interminable sidelong jungle, a breakneck precipice or impass-

able dangerous gorges.—Verily the men who design and carry out the work on a great part of this Uva line, must dispense with nerves. We travelled—in some parts crept, hung or squeezed along—just in time to see the difficulties. By this date doubtless the roadway is its full breadth where we found merely a stepping-stone or a niche in the rock to get round a corner with a wall of mountain above and a sheer precipice below; while later on when the way is all clear, and when the precipices, embankments, &c., will be overgrown, wreathed in creepers or covered with grass and low jungles, visitors will wonder where all the difficulty lay. So it has ever been in the history of railway construction in this tropical land; and certainly nowhere nearer Colombo have there been wilder or more difficult portions to construct than on the Uva line. Mr. Mayow seems to the manner born as a railway contractor, and we hope his work will turn out as profitable to himself as it must be useful to Mr. Waring and his staff. To his original piece of work an addition had been made in a difficult piece of sidelong rock, and it was in the passage of this portion that we had as it were to hold on by our eyebrows, until a surer and wider footing was obtained on the much easier section completed up to the ballasting, by Mr. N. C. Davidson before he left for his holiday. We are now below the castellated peak of Beragala and the Batgoda trig point, several miles up the line from Haputale, and have noticed all along, the large amount of good work done, and the various clever contrivances in tramways, steel waggons, &c. to expedite work. Here, now, we enjoy the splendid panorama spread before us in the valleys of Uva stretching far below.

HAPUTALE TOWARDS NANUOYA : THE FIRST SECTION.

The change which has taken place in the appearance of the estates running down the Haputale slopes within the past few years is enough to justify a strong belief in the revival of coffee. Some of the larger places like Wiharagalla show a wonderful improvement, and on Batgoda we saw a field promising a good crop, which two or three years ago was condemned by a competent inspector as only fit for grass. Whether it be due to Mr. Mayow planting so many ornamental and useful trees all over his property or not, certain it is that the coffee has greatly improved everywhere. The grevilles and acacias afford shelter from wind, and they also no doubt bind the soil. There are few steeper estates in the country than Batgoda, and few which have given heavier crops of coffee in its day, and so it ought, for we suppose it bears the pre-eminence of having fetched in its prime the highest price per acre ever paid for coffee in Ceylon. We believe Mr. Mayow in "the brave days of old" bought out Mr. E. G. Harding (then his partner) at the rate of about Rs. 1,300 per acre! Has this ever been beaten? The charming garden surrounding the Batgoda bungalow—with its grand view over the lowcountry—shows how good the soil is, and indeed even tea cannot object to growing on the steepest possible land—witness the high field of Berragalla—in the Haputale climate and soil.

There is an intimate relation between Batgoda and the railway, because the worthy laird is one of the most interested and indefatigable "contrac-

tors" on the Railway Engineer's list. He has already finished one section, and we found him very busy with another as was also his neighbour Mr. Wyllie of Haldummulla, an estate we visited first in the days of old Webster, the inventor of "coffee spouting." Needwood again, which was being opened by Mr. Macphail when we saw him in 1864, is still farther out and has good tea I hear. The Railway line from the Haputale terminus up to the site of the Idalgashena station runs on sidelong ground, just below the ridge dividing the estates from the Uva amphitheatre. Some parts, as we have already described, are exceptionally steep and rocky. The Government "service" road above the ridge has never in itself been by any means a comfortable route especially for the equestrian; but it has been rendered a great deal more risky by the railway blasting and clearing out below, and there are considerable stretches where a sudden start and false step of the horse would secure destruction. A true tale is that of a lady enticed for a ride along the route without knowing what was in store for her until she was fairly in for it, and it was too late to do aught but "follow my leader," but who felt during the two or three minutes till the danger was past, that it was dangerous even to breathe much more to speak—and that butterflies by coming in their way were serious obstructions! Nor was the danger less some month ago, down below, albeit to walking visitors who had to cling to the creepers or roots on rocky faces of the line, in order to span hollows whose bottoms were hidden in the jungle below. The Idalgashena station is expected to serve the town of Haldumulla and all the estates in that neighbourhood. This will be a comparatively easy matter as

regards carrying packages, or bags of rice down hill; but how to bring the coffee bags and tea boxes up will not be such an easy matter. Mr. Dumphy, late of the Railway Staff is credited with the bright idea of erecting and working a wire tramway between the station and the junction of the Laymas, Pass and Haldummulla roads, so as to serve all the traffic of the lower parts of the district. This, if successful, would be a capital plan. No doubt, to the estates in "West Haputale" will send their produce to this station. On the Idalgashena Pass commanding Dondra and the Basses Lighthouses in these modern days as well as the salt pans of Hambantota, we are on classic ground famous in Sinhalese history. For, not far from here is supposed to have been fought the decisive battle in which the Kandians practically annihilated the Portuguese invading army under Constantine de Saa. At any rate, a plateau a short distance below the Pass was pointed to me where relics of a Portuguese camp have been picked up even within recent years. Leaving Mr. Mayow's section now behind however, we got on more reasonable, reliable ground where the line tends round above Beauvais estate and below the bungalow of Mr. Mackintosh, the Engineer in charge of the division. Beauvais estate opened many years ago by Dr Boyd Moss is in a picturesque valley all to itself, though the Idalgashena property has been gradually extended close to it and evidences of further cultivation (though abortive) are not wanting in the neighbourhood. Indeed close by here was the grant of patana land made to experiment with cinchoras, about which such a storm was raised in Sir John Douglas's time, but which really amounted to so very little. Perched high

up in its garden of flowers, the Engineer's bungalow, placed about four miles from the Hajuatale end of his work, affords a glorious panorama over a far expanse of country; the estates above the Pass are on a level opposite, and a week before our visit they presented the appearance of a sheet of snow, the blossom being visible three miles off in a straight line!—We now had the guidance of Mr. Mackintosh himself, and at the 5th mile we came on a series of heavy cuttings, big barks and extensive culverts such as indicated a very large amount of work to get through. The line in this part runs round one or two sequestered valleys, the approaches to which generally on rocky ground make "sensation corners," but these are of small account as compared with the "Horse-shoe Gorge" farther on, Here, indeed, we are at big works on a grand, difficult and expensive scale. This bit of line for picturesque outlook will, in our opinion, compare with any on the great American Railways. We were reminded of a show place in the Susquehanna Valley at one point; and again the American "Horse Shoe" in the Rockies was brought to our recollection, but nowhere across the Western Continent did we see anything so attractive and interesting as the outlook from this winding Uva line. California alone presented a parallel on some parts of its mountain railways.

ALONG THE NEW UVA RAIL- WAY LINE :

PROGRAMME OF THE GOVERNOR'S TRIP.

On March 22nd, His Excellency will meet Mr. Waring at Nanuoya, and travel 2 miles by engine and on by horse to Pattipola, halting at Mr. Oliver's bungalow.

On the 23rd, from Pattipola to Haputale in the morning; in the afternoon visiting the Happy Valley Mission school and Reformatory and returning to Haputale to dine and sleep.

On March 24th, ride across to Wilson's bungalow, drive thence to Nuwara Eliya.

THE HAPUTALE DIVISION.

While His Excellency the Governor is today, (March 24th,) travelling along the Uva Extension railway from Mr. Waring's residence at Summit Level to the Haputale terminus, it may be well to resume, and complete, our account of that section as noted during a journey the other way. Too much cannot be told respecting the various sections and big works on this very important undertaking, especially at a time when they are under viceregal attention.

In our last instalment we referred to the good work done on Mr. Mackintosh's division of the line of such contractors as Messrs. Mayow, Wyllie, N. C. Davidson and Capt. G. L. Williams. We further referred to a scheme for working a wire tramway between Idalgashena station—the station for West Haputale, Beauvais Valley and most of the Haldummulla estates—and the junction of the Laymas and Pass roads below Berragalla. This is a most important proposal, and it is one that the Government should specially favour, for if it worked satisfactorily at a moderate cost saving a heavy climb back to the Pass, it would go far to reconcile the Lower Haputale planters in sending all their produce by the railway. Cartage has fallen so enormously in price between Uva and Colombo, since the days when the ever-to-be-lamented Downall used to grieve over his inability to do justice to his properties, when carts were

both scarce, and dear, that Haputale men are not unfrequently heard to say, "The carts will beat the railway yet." But this remark is only ventured in connection with carting produce downhill to Colombo; how about rice, manure, machinery and general goods up? And seeing that the railway must beat on the up-traffic, where are the carts that will travel up empty in order to get cheap loads down? Again there is the liability to cattle murrain, by no means unknown in Uva. Apart from this, there is the fact that tea when once properly packed cannot be too speedily or securely transported to the shipping port—that experience in bullock carts for days and weeks together (especially in the monsoon seasons) may depreciate the value considerably. From all this, we may see that Uva planters cannot help themselves in using the railway more particularly if it is extended to Bandarawela with a comparatively level road thence to Passara, and if Idulgashena station is supplemented by a Wire Tramway connected with a point nearly 2,000 feet lower down. But it is time that we got back to the line. After a fashion we have already disposed of the section between the Haputale (temporary) terminus 4,650 feet above sealevel and the Idulgashena Station—a distance of five miles, the rise in altitude bringing us to 5,196 feet above sea level. The top of Idulgashena peak close by is 5,800 feet; from the ridge close by the station, a splendid view over the lowcountry to the sea at Dondra, Hambantota and the Basses lighthouse can be got. The work so far has been chiefly distinguished by heavy rock and earth cuttings and embankments, some very ticklish sidelong work above precipices, with culverts. Mr. Craig is the Assistant to

the Engineer in immediate charge of this first section. It is on the upper side of Idulgashena when we get into the country of "gorges" that the tunnels begin to be abundant. There are altogether as many as 17 to 18 tunnels on this Nanuoya-Haputale Extension, of which one is known as the "baby" tunnel from its comparatively easy management. So far, there have been very few accidents along the line, the most serious on the Haputale side being the death of two cooly miners in a tunnel who ventured in too soon, supposing the blast to have gone fully off, but to whom a sudden after-blast from dynamite proved fatal.

We ventured to give a thorough inspection of the first tunnel we came to, following Mr. Mackintosh's footsteps from the service road away down a side-long patana at an inclination of 1 in 1, a difficult enough job for a Colombo man in the descent, but which was even worse in the climb back. True to the reputation of his clan and Celtic agility, the Highland Engineer simply ran up and down the "precipices" here and elsewhere as if he were indeed a "cat"! The outlook, or rather insight, at the tunnel was not very encouraging—none of the bold, true, firm basaltic rock encountered on the Kadugannawa and Ambagamuwa Passes: on the Uva side the rock when it comes to tunnelling, is nearly all unreliable and "rotten." Nearly every tunnel on Mr. Mackintosh's section has to be lined with masonry, and this is what Chief Engineer Waring considers to be "no luck with the tunnels." At the farther end of our first tunnel inspected, we found the miner in charge looking very grave indeed over his work in fitting in great timber

piles to keep the roof from tumbling in on the heads of the borers and blasters until the bore was cleared out to the size which admitted of the masonry being built up and well cemented to support the burden. Not far from this tunnel in a shady glen beside a gurgling stream, Mr. Mackintosh had established a lime-kiln to deal with a capital find of "limestone" close by—such a "find" as would be almost impossible on the Kandy side. The lime kilns of the natives—chiefly for burning "coral"—are common enough between Colombo and Mount Lavinia; but we never noticed how wasteful they are in construction with their wide open tops or mouths allowing the heat freely to escape until we noticed those of Mr. Mackintosh, circular in construction and tapering to the top where the diameter is not half that of the furnace, so keeping in and concentrating the heat and causing an immense saving in fuel.

Seeing one tunnel, especially in its initiatory stage, may suffice for the inspection of a good many and when at one point we come on "*eight tunnels in a mile*," we may surely speak of more than enough of a good thing! Each tunnel has its immediate guardian in an experienced European foreman miner, sometimes two, and most of them have taken the work on contract rates out of the Engineer's hands. Men of large English (Cornish) or Australian experience we found along our route as we dropped down to hail the tunnel foreman at each fresh obstacle, and rare characters are to be found amongst them. In this way, we came on one great-backed supervisor who was directing his gang of cheery coolies in a hole

dark as Erebus,—

and whose atlantean shoulders looked as if he could keep up the hillside himself. Sympathising with him, on the tiresome lining business, as so much slower and more expensive in connection with the tunnels, we found ourselves in for contradiction at once—a case of “do ye want to argefy?”—“Why there is the timber” said the stout Cornishman “in the forest close by, the stone close at hand, the lime round the corner, and the cement coming in barrels across the patana—whatmore do you want—and then just think of the saving of dynamite and steel!” There was a merry twinkle in the eye of the tunnel contractor which, methinks, referred to his own thought of the job being perhaps more profitable as it stood, with lining rather than without. That same transport of a thousand of barrels of cement from Wilson’s Bungalow by tavalam bullocks, “across the patanas” which means uphill and downdale, will be no joke, we suspect, and must cost a good penny in itself before all the tunnels are duly lined and the many other big works of viaducts &c. on the Haputale division, complete. Leaving this first series of tunnels we round on what seems no ordinary curve into the Horse Shoe Gorge, at the head of which there is to be an iron-girder bridge: no easy matter for any but steady headed, surefooted folk to creep round on the narrow roadway above steep precipices where we passed. We should like well to have had a talk with Mr. Mackintosh’s lieutenants, Messrs. Ben Cooper and Smith, but the circumstances were not favourable. What we saw was quite enough to show the heaviness of the work engaging their attention. The surveying of the line along this very steep, sidelong precipitous country must have been no easy matter,

and apart from the stinginess of the Forest Department in respect of the supply of timber, we had evidence that it is no light business to get an ordinary post, let alone hundreds and thousands of trees, to where they may be wanted on the tunnels. We came on no less than eight brawny coolies slinging along a single post from the jungle.

We were now we'll inside the Ohiya Valley, to the side of which this most picturesque Uva railway line clings, running in and out of the several gorges which mark the entrance of as many streams, until we came to a grand crossing by a big bridge whose piers gave evidence of height. This is to run over a considerable cataract with great masses of rock above and below in the forest. Indeed we can only describe our course as a succession of tunnels, culverts, viaducts or iron-girder bridges, with a comparatively limited extent of earthworks until we got higher up and round the valley where we come on an embankment of no mean proportions. The climate must be delightful for the overseers, coolies, &c. to work in all along here, save in the burst of the North-east monsoon. A great part of the works towards the upper end of Mr. Mackintosh's division is shaded by the forest, and the occasional outlook through the trees on the grassy valleys stretching away to Namunakulakanda is specially charming. The shades of evening had begun to fall before we had ridden up to the vicinity of the great tunnel through the dividing ridge, the "bore" which has been described as being favoured with the South-west monsoon blowing in at the one end and the North-east at the other. All we can say is that the first view of the

province of Uva to the railway travellers as their train emerges from this tunnel carrying them into new territory and a new climate will be varied and beautiful in the extreme. The first burst of travellers from the West to the East—from summit level through the dividing ridge tunnel above the Ohiya valley with the grand *coup d'œil* of forest-clad mountain-sides, rolling patanas and the Haputale range with plantations far ahead, is sure to be remembered in their experience as unique and grand beyond all precedent. Even our afternoon's experience which involved an "inspection" of so long and varied a series of heavy works was something to remember, while the scenic outlook will ever remain in our recollection, as

A thing of beauty and a joy for ever.

Mr. J. R. Mosse in his Report of 11th July 1878, refers to the section which we have just passed over as follows :—

The country from the summit to Idulgashena is unfortunately *excessively rough*, and probably more unfavourable for a railway than any that can ordinarily be found, with the exception of the Ghaut or Alpine lines or the mountainous districts of South America. It gives me pleasure to speak of the great skill and care which has been exercised by the Engineering Staff in the staking out of this most difficult line; and with the same limitations as to curves and gradients. I believe no improvements can be made on it.

It was late before we made the hospitable bungalow of the Chief Resident Engineer which we found next morning to be admirably situated with the headquarters' officer, for his personal Assistant,

draftsmen, clerks, &c., so as to make his supervision of both divisions specially convenient. The little railway town of Pattipolla on summit level is close to the junction of a number of roads—to Horton Plains, Nuwara Eliya, to Uva or to Dimbula, while the Ambawala station and the path to the New Galway district and Wilson's Bungalow is not far off. It will be quite necessary to construct a cart road to enable not only the estate produce but native traffic to reach the station specially fixed on for this division of Uva. One proprietor (Mr. A. H. Dingwall) has built a very handsome mansion quite at the top of his estate (Warwick) in a position which must make it very convenient for the coming railway station (being only $1\frac{1}{2}$ mile distant), while the situation is most commanding and healthful—the climate being described as superior to that of Nuwara Eliya. Indeed, it is a question whether around the Ambawala station on the adjacent Elk Plains there may not spring up a rival station to the Sanatorium, the convenience of railway transport practically to the very doors of the cottages, being one attraction for visitors. Of course the Ceylon Government will have to get the present rule about no land being sold above 5,000 feet relaxed, before that can take place. But it is impossible that even a Secretary of State can face the sarcasm of making an expensive first-class railway through a long and wide expanse of country which the Crown refuses to allow to be touched by settlers—planters, gardeners or householders. As at present ruled, the Dimbula-Uva railway is to make no difference to the crown territory between the two districts! Such a proposition has only to be mentioned to be condemned.

The New Galway district generally will be made wonderfully accessible by the new railway : it will be easy to drop down, at least, from Ambawela station (which will be 12 miles from Nuwara Eliya) to Warwick, Glenorchy, New Cornwall and Ambawela estates or farther round to Albion where Mr. A. J. Kellow has been showing the Forest Department how they might cover the patenas of Uva, by the hundred thousand acres, with quick growing valuable Australian trees. Here too will be found one of the best private fruit and flower gardens in the country. It may be a question whether via Ambawela station may not also prove the shortest way to Hakgala Gardens if a jungle path be cut from the Upper New Galway estates.

Returning from Ambawela, we may remark that a good deal of trouble is encountered close by in railway construction from swampy ground, and after passing through forest, we come close by Pattipola on the cutting and tunnel —if such a term can be applied in contrast with the great railway works—by which the Kandyans of old directed the stream running down the side of Totapala which otherwise would have passed into Dimbula, towards Uva so as to irrigate their paddy fields in the valleys far below. The Pattipola-ela (irrigation channel) is crossed by the railway on a five-feet arch. The irrigation tunnel is 50 feet below the surface, while the diversion was effected by a masonry dam and Mr. Waring thinks well of the plan and of the way in which it was carried out.

We are now well into Mr. Oliver's division—that from the Summit level to Nanucya—and as it has been in most of its parts so frequently and fully described in letters “from the Hills,”

—justice being done especially to the magnificent outlook over Dimbula, the sylvan scenes on the plateaux, the many streams, cataracts and waterfalls, I need only add a very few lines. It is enough to say that though Mr. Oliver has not got such a continuous array of heavy works as his colleague Mr. Mackintosh, yet he has the longest tunnel, the highest and longest viaduct and biggest embankment and cutting on the line. An embankment requiring 60,000 cubic yards of stuff over a 250 feet culvert is no joke. The viaduct again will be a splendid piece of work 260 feet long with 3 piers 80 feet high. But we are simply repeating what has already been fully described, and all we need add is that notwithstanding all that has been, or may yet be, written, the traveller on the new railway will be ready to exclaim, as new interest if not beauty meets him at every turn, the half was not told me." We conclude our notes with some tables of interest in themselves and convenient for reference:—

NANUOYA-HAPUTALE RAILWAY EXTENSION.

(From Official Reports)

Stations.	Distances apart measured from centre to centre of Station grounds.		Average Gradient.
	Miles. Chains		
Nanuoya to Ambawela	8	76.17	1 in 67.69 rising
Ambawela to Pattipola summit	2	58.12	1 in 62.26 rising
Pattipola to Idulgashena	9	18.72	1 in 48 26 falling

Idulgashena to Haputale

	4	40.13	1 in 47 97 falling
	—	—	
Total	25	23.14	

Revised Estimate of ROLLING STOCK required for the Nanuoya to Haputale railway, proposed by Mr. Waring in 1885:—

Description of Work.	Rate for each.		Total Amount	
	R.	c.	R.	c.
Four Locomotive Engines similar to those in use upon Nanuoya railway	40,000	0	160,000	0
Four 1st and 2nd class composite double bogie carriages	9,616	83	38,467	32
Two 3rd class double bogie carriages	7,278	49	14,556	98
Five 3rd class and brake van composite carriages	7,779	74	38,898	70
Three double bogie goods brake vans	4,556	79	13,670	37
One horse box	2,716	0	2,716	0
One carriage truck covered	1,985	0	1,985	0
Ten covered goods wagons upon 4 wheels	1,850	0	18,500	0
Four deep-sided goods wagons upon 4 wheels ...	1,300	0	5,200	0
Four low-sided goods wagons upon 4 wheels ...	1,200	0	4,800	0
Two timber swivel wagons upon 4 wheels	1,500	0	3,000	0
One cattle wagon upon 4 wheels	1,850	0	1,850	0
Total ...	R303,644 37			

(Compiled in "Observer" Office.)

NANUOYA TO HAPUTALE.

Stations.	Distance from Colombo miles.	Altitude above Sea- level.	Miles be tween Stations about.
Nanuoya (? "bathing stream")	128½	5,291	
Ambawela (the mango field)			
or Elk Plain Station	137½	5,995	9
Pattipolla (cattle fold)			
or Summit Station	140	6,219	2½
Idulgashena (chena of the Idul trees)	149½	5,193	9½
Haleh ta utp) e Sapt. Plain)	153½	4,695	4½
Bandarawela (Banda's field)	157½	4,000	3½
			28

NANUOYA TO HAPUTALE : HEAVY WORKS

(Approximate list)

Nanuoya	No. of Tunnels.	Viaducts.	Big Em- bankments.	Big Iron Bridge
To Ambawela	2	1	3	2
To Pattipola	0	0	1	0
To Idulgashena	16	2	10	4
To Haputale	0	0	4	0
To Bandarawela	0	0	2	0
	19	3	20	6

[We publish this last list with "fear and trembling" that it may be pronounced all wrong by authority; but it is at least an approximation.]

A RUN INTO THE
NORTH-CENTRAL PROVINCE;
WITH NOTICES
OF THE
ARCHÆOLOGICAL SURVEY
AND
IRRIGATION WORKS.

ANURADHAPURA AND THE ARCHÆOLOGICAL SURVEY.

We were just on the point of endeavouring to reproduce some of the impressions formed during a holiday visit to the North-Central Province, in reference to the natives and irrigation, when the receipt from Government of a copy of the "Second Report on the Archæological Survey of Anuradhapura by H. C. P. Bell, Esq., Archæological Commissioner," diverts our attention for the time, to another and not less interesting branch. Speaking for ourselves, so far from being disappointed on our first introduction to the great works and interminable ruins which mark the site of the ancient Northern Capital of Ceylon, we can only say that our anticipations in respect of magnitude, extent, variety and interest were far more than realized. "The half had not been told us," or rather past writers seem to us to have failed to do justice to their subject. True, nothing can add to the astonishing calculations entered into by Emerson Tennent with reference to the magnitude and capacity of the great dagabaas, and the total area probably covered by the city in its time of prosperity thirteen hundred years ago and more. Nor would it be easy to improve on the brilliant word painting and glowing imagery of Spence Hardy in his descriptions of Anuradhapura as he saw it ruined and jungle-

covered, in contrast with his realizations of its ancient grandeur. Nevertheless, these and other writers now appear to us to have failed to expatiate on, if indeed they appreciated the opportunity presented, if means were made available, for tracing out and almost resuscitating great portions of the ancient city. The dagabas are wonderful landmarks in themselves, and the man is surely to be pitied who can gaze on the tree-clad "Jetawanarama" with its pinnacle of dark-brown brick, recalling so many ancient Roman towers, without admiration of its picturesque and massive beauty and intense interest in historical fact that here is the lasting memorial of that Sinhalese King (Maha Sen) who, 1,600 years ago, left his mark so widely on the land, crowning his irrigation schemes by the construction of the great tank of Minneri, twenty miles in circumference. All the great dagabas have a similar historical connection and story of interest, even if in their present forms, they fail to rival the "hill of victory" in "glory of outline." No doubt it is open to the modern critic to find fault with the work of restoration, or rather conservation which has been done on "Abhayagiri"; but who that has climbed and stood on the pinnacle of what remains of this "mountain of safety"—over 2,000 years old—to enjoy the wonderful panorama stretching from below his feet, but must regard with satisfaction the preservation from absolute destruction of so striking a feature of the old-world as this Sinhalese city of the plain. True the height of Abhayagiri is now only 230 feet against the estimate of over 400 feet for its original altitude; but even at the former elevation—nearly double that of the Colombo clock tower,—the command afforded of the modern town, the jungle-covered ancient city, the

tanks filled and empty and the far-stretching horizon of forest backed by detached hill ranges enabled us, with the aid of most competent guides, such as favoured us, to acquire understanding of past and present far beyond what any printed pages can ever afford.

It is also evident that Emerson Tennent's big book (latest edition 1860), is quite out of date when we consider what has been brought to light in Anuradhapura during the last fifteen years; and even Burrows whose Archæological Report and Handbook go back some five years, is now falling behind. Further exploration and excavation cannot fail to meet with a rich reward throughout the area covered by both the "sacred" and "secular" cities, and the new departure taken last year at the instance of Sir Arthur Gordon by the appointment of so competent an officer as Mr. H. C. P. Bell, as Archæological Commissioner, could not fail of important results, even though that officer has been most inadequately supplied with the means to carry on his operations. Very fortunate, however, Mr. Bell has been in securing the cordial co-operation of the present Government Agent, Mr. Ievers, who in the past was instrumental in bringing many very interesting ruins to light, and of Mr. A. Murray, Provincial Engineer. Under the latter's direction, there has been carried out, the conservation of King Dutugemunu's Miriswetiya Dagaba by the construction of great rings of encircling masonry, some of it being arched after a fashion certainly unknown two centuries B. C., but none the less ornamental while decidedly excelling in strength. All the preservation and restoration here is being done at the expense of a Prince of Siam who paid down a large amount to secure prompt attention.

There has been of late years, therefore, and there still continues, much stir among the ancient monuments and ruins of Anuradhapura. A great amount of work has been done since Sir John Dickson constructed his outer and inner circular roads, but if only properly prosecuted, there can be no doubt that the mission of Mr. Bell is destined to lay bare that which cannot fail to add immensely to the interest of the ancient capital. Mr. Bell's first Report published last year, and his second which only reaches us today, though dated October last, fully show this. The delay of this second (quarterly) Report has been owing no doubt to the preparation in the Surveyor-General's office of a series of most interesting diagrams and plans illustrative of the "finds" made and the work already done by the Commissioner. First, we have a complete plan of the "Supposed Monastery of the Abhayagiri fraternity, Anuradhapura"—the sect of Buddhists who adopted the "Wytulian" heresy. Next comes what is perhaps Mr. Bell's most interesting "find," in a handsome "Buddhist Railing"—the only one found in Ceylon—enclosing a building south of the Abhayagiri Dagaba. It is all of solid masonry, the openings in the railing being horizontal slits, small in proportion to the massiveness of the "posts" and "rails." The work in "coping" and "plinth" and in the "pillars" of the building is clearly laid down, and the whole railing is found to enclose a considerable space. Next we have a partly coloured plan of the west façade of a brick building at the 5th mile on the outer circular road, with the ground plan and pavement elevation. Finally, a diagram is given of an "ancient stone bridge over the Kanadarawa Ela" with the elevation, plan and section, the bridge being some 80 to 90 feet long

All this is full of interest, and Mr. Bell furnishes adequate letterpress information, his Report being an eminently practical and full one so far as it goes. But the chief value of the whole—plans as well as Report—is to show how rich a harvest has yet to be reaped archæologically. The Buddhist railing and the building enclosed by it were brought to light from under a covering of four to six feet of earth, simply through one single post protruding! Now there are square miles of jungle, where similar or even greater "finds" only wait the clearing and digging for them; but which it will take many years to overtake at the present rate of progress. Even from an economical point of view, and within the limited area Mr. Bell is obliged to explore, it would be best for the Ceylon Government to multiply the cooly force (of 20 or 30 men) five or ten times so as to get what they want done in a year or two, rather than to go on "pottering" for six or more years.

On the other hand, it has to be remembered that, so far, scarcely anything has been done beyond the bounds of the so-called city, "sacred city." Beyond its limits, on the North side, lay extended the "secular" city, and the greatest "find" of all perhaps—"the King's Palace"—can only be discovered in this outside division. Who is to find it—to lay the walls and pillars of this palace bare? The fact is that not until there is a clearing away of four or five feet of superincumbent earth from several square miles, can justice be done to the exploration and excavation of the grandest, if not oldest, capital of Ceylon. Tennent, Harry, Dickson or Burrows could not describe what they never saw—what is hidden, and well preserved fortunately

— under a thick covering or a big mound of mother earth. Herein lies the great archæological interest of the region. All Europe and the rest of the civilized world have been full of interest over explorations in Asia Minor (the ruins of Troy), in Egypt &c. The ancient ruins in Ceylon have hitherto been supposed to be well defined—if not sufficiently cleared. But the fact is there is room and reward for a number of explorers and excavators. We cannot expect the Ceylon Government to do more than touch the fringe of the work. We want a “Dr. Schlieman” to come to the rescue. Where is he to be found? And yet surely there is more than one ready, among the rich men of Europe and America, to take up the mission. Some of the wealthy but idle men of Europe, it may be, are longing for a chance of distinguishing themselves in a new line—of connecting their name and fortune with a work likely to excite perhaps a world-wide interest. How, then, are men of this type to be told about, and brought to, the North-Central Province of Ceylon? We turn for answer to our past Governors Sir Wm. Gregory and Sir Arthur Gordon who yield to no Anglo-Ceylonese living, in their interest in everything connected with Anuradhapura. Can they not excite enquiry on the part of “English Society,” the literary and antiquarian members of the “Athæneum Club,” or such clever leaders of thoughtful as well as wealthy circles as Lady Jeune—herself the grand-daughter of a former Governor of Ceylon; and also get the metropolitan press to notice the subject, with the possible result of a thoughtful English millionaire or wealthy savant, being roused to devote his attention to our great buried city and to the advantage of bringing

its far-extending ruins into the full light of day.
We trust so.

*PROGRESS IN PURELY NATIVE
DISTRICTS IN CEYLON.*

In the prosperous days of coffee in Ceylon, our dear friend "R. B. T."—the father of the planting enterprise—was accustomed to say up to twenty or even fifteen years ago that "it was but 10 o'clock A.M. yet in Ceylon." That certainly seemed a safe estimate of the position in the face of the large additions made to the cultivated area of coffee in new districts in the "seventies" and early "eighties." But alas, the the extinguisher on our hopes and progress in "coffee," came in a form never anticipated by those who preached exhaustion of soil and of forest-land worth planting. The fell disease which so speedily covered the planting districts spared the young, newly-planted field no more than its old worn-out neighbour and the result in ten years, was that our old staple might well say,—

Farewell, a long farewell, to all my greatness!

But how now, let us ask in passing and in a word, about the new staple? Well, so far as human judgment and foresight can be trusted, there are certainly great differences between tea and coffee which make in favour of the more suitable and apparently more permanent character of the former product in the soil and climate of this island. The tea plant as compared with its predecessor is far hardier, it grows from sea level to our highest altitudes in our moist zone; it is to a great extent independent of seasons, though loving moist heat; it is just the plant for

an evergreen leafy island, and if attacked by pests we can fight them far more efficiently than we ever could have done in the case of coffee. So much in favour of the thought that with tea (and such adjuncts as cacao, cardamoms, some cinchona and rubber not forgetting the palms) we are still justified in saying that Ceylon has not yet reached its meridian height as a Planting Colony.

But this is not the text from which we wished to preach today. There has, however, always been an intimate connection between planting and native progress. The advance among the people in this British Dependency during the first thirty to forty years was scarcely worthy of remark as compared with the change for the better—in improved Government, useful public works, material comfort and spread of education—during the same period within the planting era. But for a long time it was urged, and with some justice, that progress among the purely native sections of the people was confined almost entirely to those who profited by the planting enterprise. Only the Ceylonese who felled jungle, sorted produce, built houses or generally worked as artificers and servants to the planters and others connected with the new enterprise, could be said to be prosperous and advancing. Let the observer go away from the districts occupied by the planters or adjacent to the large towns, and see how great was the contrast presented! Not only did the planters influence the contrast, but many of the Kandyans and lowcountry Sinhalese catching the general fever, began to plant, or extend their coffee gardens and very soon—in Uva, Kotmale, Matala and Nabaragamuwa especially—wealth beyond

native's dream of avarice a few years before, began to pour in; and the result was seen in towns and villages springing up with pukka tiled houses, (often well furnished, and with appurtenances of comfort) where all had been jungle.

Has Sir Arthur Havelock in this connection realized as evidence of native progress, the fact that fifty years ago there was scarcely a town in the Central and Western Provinces, beyond the capitals, worthy of the name? That even Kandy had a miserably poor appearance, while Matale and Badulla were straggling, contemptible villages, and Gampola, Nawalapitiya, Haldummulla, and a host more of hill country towns had practically no existence. But all this development took place as we have said under the ægis of the planting enterprise. How fared the native districts where the European planter was only known as a sportsman, where no foreigner's money circulated for felling, carting, carpentry or even in return for native produce? Sir Henry Ward was, of course, the first Governor, to turn his attention to such outlying and purely native districts. Sir Hercules Robinson followed suit most energetically—his guiding dictum being, that the planters being well able to take care of themselves, a Governor and Civil Service in Ceylon have mainly to look after and develop native agricultural interest. Sir Wm. Gregory went even further in his perfect honesty in declaring that he got the money to create and renovate the benighted long-neglected North-Central districts from the surplus revenue provided by the planting enterprise; and no one can allege that Sir Arthur Gordon did not give thought to outlying and purely native districts every day of his six years' tenure of office in Ceylon.

What then has been the result? If we are to listen to the men who have not hesitated to asperse an honourable Service, the leading members of which have given 15, 20, aye 30 of the best years of their lives to the benefiting of native agriculture and interests as far as means and knowledge permitted,—we may believe that nothing has been done, that the Ceylonese beyond the towns and planting districts are in a worse plight now than they were fifty years ago, and that so far from their having been a response in development and progress to the anxious, untiring efforts and large expenditure of public money by Governors Ward, Robinson, Gregory and Gordon,—there has instead been stagnation,—decadence,—ruin! Never was there a greater slander on public officials,—a more entirely baseless statement as regards the real facts of the case.) There has been development, social advance and material progress in our purely native districts since Sir Henry Ward's day of the most striking and most gratifying nature. The evidences are patent to all who choose to go and observe and inspect them as we have done. The records of the condition of such districts forty years ago are still extant, so that the means of affording a comparison—if any comparison be required—with the present well-fed, healthy and prosperous farmers and peasantry are ample and altogether satisfactory.

And here, let us pause for a moment, to press home a fact of the utmost importance on readers of only recent experience in the island, on visitors and especially on members of Parliament or of the Cobden Club who take an interest in Ceylon affairs. It is this: *that all the distress of which so much has been made in connection with the*

Paddy rent or tax of late, has taken place not in purely native, but in planting districts. This is the case, for instance, in respect of Walapaite and Upper Uva. The Kandyan there for many years depended more on their coffee than on any other cultivation. The distress primarily if not entirely, arose from the failure of coffee which had ruined hundreds of European planters. Let it be remembered in London, that Uva is the only district specially visited by Mr. Schwann, M.P., when out here. That gentleman was sent apparently to interview Mr. Fisher, almost the only Government Agent who has set himself openly against the paddy levy. If Mr. Schwann wished to learn both sides of the question, why did he not visit Messrs. Elliott, Twynam, Bailey, levers, or at any rate Messrs. Moir and Dawson, and the native districts they could have shewn him? But this is by the way.

Our statement now is that in the large and purely native districts of the Western, the Southern, and the Eastern provinces, as well as in portions of the North-Western and North-Central provinces with Jaffna, the evidence of agricultural development and progress is most marked. All this, too, is in correspondence with the direct efforts of Government and its officers; roads and bridges, principal and minor, have been constructed all through these different native districts, and have been productive of a world of good. Irrigation tanks, big and little, have for thirty-five years largely and almost continuously occupied the attention of Governors, Agents, Assistants and Public Works officers, and the result in nearly all the large areas we have named is most gratifying and remarkable. If any sceptic wishes to

have his doubts removed, let him go as we have done to the Matara district, to the Batticaloa division of the Eastern Province, to Madampe on our North-West coast, and last but not least, to the North-Central Province. Let him further go and see the change being wrought by the Tissamaharama works in the Hambantota district, and most certainly he will return with ample evidence that the change already wrought, or in early prospect, in purely native districts, is quite worthy of being named along with the wonderful transformation effected in our planting divisions.

Now let it be remembered that as regards "irrigation," Sir Henry Ward first began the work of renovation and restoration on a big scale in Matara and Batticaloa districts, while Sir Hercules Robinson most liberally and energetically supplemented and extended his predecessor's schemes. But it has been very conveniently forgotten in certain quarters that it took wellnigh twenty years to see full results realized from the works begun in 1855-7 by Mr. Birch in the East, and Mr. Harrison in the South. Among those who criticised Mr. Birch in those early days was an energetic young Surveyor, now an honorable member of Council, and who, manfully, is the first now to confess how greatly he erred; but he, unfortunately, failed to apply the argument to his colleague (Mr. Christie) the other day in answer to his diatribe against Kalawewa. Mr. Grinlinton might have, in one sentence, turned the tables with great effect:—"Sir, in just such terms as we have now heard Kalawewa criticised and denounced, did I and others (in our ignorance thirty years ago) decry the Irrakamam, Amparai and other Eastern tanks which have been proved

among the most useful in the country. So no doubt will it be some years hence in the case of the North-Central Province." Of course Matara and Batticaloa districts have long ago been recognised as illustrations of the success of irrigation and of a striking development of native agricultural enterprise. Nevertheless, they have not escaped criticism in connection with the paddy-tax, and it has been broadly stated that cultivators even in the South and East are oppressed and degraded by this levy which has caused land to go out of cultivation. Now we assert most confidently that not a single acre in these regions has gone out of cultivation because of the grain tax. On the contrary, there has been most striking progress, and the present year will probably show splendid returns from paddy fields. But not simply on progress, in the East and South, have we to dwell: we want to speak of purely native districts far more recently entered on, and to show that the change already effected and the prospects of results in the future, are of the most gratifying and encouraging nature. For this, we must endeavour to find room in our next issue.

SUCCESS OF THE IRRIGATION POLICY IN THE NORTH-CENTRAL PROVINCE AND HAMBANTOTA DISTRICT.

Sixty years ago, as we are told in his Memoirs, Major Skinner found the district of Nuwakkalawiya inaccessible save by tortuous, overgrown and almost impracticable native paths. When once he forced his way through from Arippe, "the world of stone pillars" was almost, a great revelation to him as to Robert Knox nearly two hundred

years earlier. He found in parts of the district too, a considerable population and corresponding cultivation; but in others the remnants of the people were visibly dying out from disease engendered by bad food and worse water. At that early date, the future great Roadmaker tersely summed up the two great wants of the people in what is now the North-Central Province as "Roads" and "Water." Is it not a disgrace to the British Government, asked the then young officer (Lieut. rather than Major Skinner) that the rate of commutation for grain in this part of the country should be *a penny a bushel*, simply because there is no market for its disposal through want of a single road connecting the district with the rest of the island? Turning to the other side of the question, Lieut. Skinner was equally confident in affirming that if "water, water" was only supplied to them, the people of Nuwarakalawiya could do anything. We refrain from referring further to the singularly interesting pages in which the North-Central districts are noticed in Major Skinner's life, because we republish the main portion elsewhere to accompany our remarks.* But we must point out that the only thing that prevented Governor Sir Robert Wilmot Horton from becoming the Renovator or "Regenerator" of Nuwarakalawiya, forty five years before Sir Wm. Gregory turned his attention to it, was simply the want of revenue. For, as the young officer who so energetically pressed the matter on the attention of his Chief, pathetically adds what could be done out of a general revenue not exceeding £370,000—about the amount of our Railway Receipts today

* See Appendix page lii

—considering all the absolutely prior claims upon it for the current government of the island?

The only other matter suggested by the pages we reprint, is the reference of Lieut. Skinner to the terrible obstacle offered to his surveying and road clearing, by "connaughts"—we should like to know if the word was so written in his *MSS*—or chena of some years' growth after clearing. Naturally our thoughts at once reverted to the wildest part of poor Ireland as affording the explanation of the simile, and we had the advantage of consulting an Irish officer who, with his attention directed to that quarter reminded us of the old saying—"to a place unmentionable or to Connaught." But recalling the word and the explanation given by Skinner to Mr. H. C. P. Bell, he at once hit on what is of course the true meaning. "Connaught" then in "Skinner's Life" is no more than the corruption of the Sinhalese "Kanatta," the name for land cleared and allowed to grow into thorny jungle four or five years old. That "Kanatta" should become "connaught" on the printed page is surely one of the most curious instances of transformation of words on record!

To turn now to the Nuwarakalawiya of more modern times, we have to consider the policy of Government of recent years and the present condition of the people and prospects of Irrigation. Looking back, and wise after the event, we have long felt how unfortunate was the oversight on the part of the Government, the intelligent public and especially the press, that, at the time the Kandy Railway was completed, an ordinance was not passed to fund the traffic receipts entirely separate from the general

revenue and especially to devote all surplus profits—after meeting interest and sinking fund contribution on debt—to Railway Extension. Sir Hercules Robinson and the home authorities would have at that time (1867-70) most readily agreed to such a proposal, for no one had any idea of the amount rising so rapidly. Had such an arrangement been made, the result would have been that many years ago, not only would Uva and Galle, but also Jaffna have been united with the Colombo and Kandy railway system. We need scarcely say how great an influence this would have had on the development of the North-Central districts, even in hastening on the era of tank restoration. But if the Ceylon Government and all concerned lost the opportunity for an early and adequate extension of their Railway system, there has certainly been no failure of duty in respect of *Roads*. In applauding Mr. Christie's elaborate attack on the Kalawewa expenditure, our contemporary of the local "Times" ventured to suggest how much better if the money had been spent on roads for the North-Central and adjacent districts. Now, this is just the kind of remark which one ignorant of the country might make. The more we have visited outlying districts, the more we have felt the absolute need of acquiring a personal knowledge with the appearance and principal features of a district if only by a passing trip through it, before discussing questions connected with its development. During our recent visit to Anuradhapura, for instance, we found it to be the centre of quite a network of admirable roads branching out in all directions. There is the road to Kurunegala, to Puttalam, to Mannar, to Jaffna, to Matale, to Trincomalee

(besides a host of minor roads) all intersecting, or meeting in, the North-Central Province, so that there are few of the remoter divisions of the island so well served with roads.

Now, as regards Irrigation works, we have ourselves to some extent to make a confession and retraction. Our attack in the Royal Colonial Institute, on the policy which led the Ceylon Government to spend money on large tanks away from population, was based mainly on the case of Kantalay. We urged then, what we have never ceased since to urge that not *irrigation* alone, but agriculture in all its departments so far as suited for the natives, should receive the attention of the Government—that an AGRICULTURAL rather than “*Irrigation*” BOARD OF ADVICE should be created. To this opinion, as well as to the great advantage of early Railway Extension into the Northern districts, we adhere; but in respect of the unwisdom of the expenditure, at the time it was incurred, of public revenue on such large irrigation restoration works as those of Tissamaharama and Kalawewa, we confess, we have seen reason to modify and indeed to alter our opinion. We are now convinced that the expenditure in both these instances, has been wise and beneficial in the interests of native agriculture and of a population which will more and more increase under the influence of such works. Tissamaharama and Kalawewa must be considered as indicating the two most important series of Irrigation Works undertaken by the Ceylon Government in the past decade; and they both have been the subject of a great deal of adverse criticism. Indeed the former has been several times associated with the terms, “failure” and “waste of public money”; and

for some years it did seem as if Tissamaharama, like Kantalay, would illustrate the foolishness of taking up large works prematurely, or where the people were not ready and eager to avail themselves of water privileges. But how great is the change of recent years, and how strange that there was no one in Council during the Irrigation discussion, to dwell on the credit this large work reflects on Government. Writing a year ago, Mr. Short reported that 1,500 acres receiving water from Tissa yielded two crops yearly, and that for the produce of 30,000 bushels of paddy a ready market was found at Hambantota, Tangalla and Matara at Rs. 1.50 per bushel—so far, of course, ousting so much of Indian rice. Not only so, but Mr. Short declared the cultivated area to be steadily increasing, the demand for land—among Sinhalese and *Moormen* from other districts, we believe—to be very keen at rates considerably above upset price, and that fresh storage had to be provided “to keep pace with the ever-growing demand for water.” The Assistant Agent moreover anticipates progress, under the present policy and conditions “until the whole country between Tissa and the sea becomes one vast cultivated expanse.” Now all this indicates progress in a purely native district; it shows a thoroughly successful irrigation policy and large numbers of people moving out to take up and cultivate land in a new district, and moreover we see large sales of the surplus paddy made in markets six, fifteen, and thirty miles away. Is it not extraordinary that facts like these have not been brought under the notice of Mr. Schwann, M.P., or the Cobden Club. Nor is this all. Such faith have the people in the next big scheme still under construction, in the Southern Province—th

Walawe works—that already in 1889, land had been sold under it at R28 per acre. We believe too that the Hambantota Administration Report for 1890 when it appears will indicate a steady continuance of the industry, progress and good results previously recorded; for, a few days ago, we had on competent authority, most confident assurances as to the great success which is bound to attend all the Tissa and Walawe works.

So much for the South. Let us now see what can be said of the North-Central Province with its thousand village tanks duly restored by the people so far as any earthwork is concerned, and duly sluiced by Government, and all this capped by public expenditure approximating to R600,000 through which Kalawewa, Yodiela and connected works have been rendered serviceable. Well, we saw one large tank full at Anuradhapura with water from Kalawewa which was simply invaluable to the people of that town and neighbourhood. We saw a good many of the natives altogether, but looked in vain for any of the miserable specimens of humanity so common in the province a dozen years ago. We heard from officers who had been absent from the district for some years that the change for the better in the appearance and welfare of the people they met in outlying divisions, was most remarkable. Not only so, but every official we met expressed the fullest confidence that Kalawewa, as it stands, would be found of such value as to warrant every cent spent on it; for even in the past season—the third of exceptional drought—it had done much, though merely as a foretaste of the great and lasting good which must be experienced in ordinary years. Moreover it was very satisfactory to find that there was no call

for further expenditure in this part of the district. Of course, if the Government can spare revenue to place additional feeders at the disposal of Kalawewa, all the better; but if not, it does not matter—"leave us alone for a few years and just watch what the development of Nuwakalawiya must be in crops and in the spread of cultivation—not simply in paddy (though that will always be prime favourite), but in palms—coconuts especially—in fruit and vegetable gardens" was the feeling expressed to us. In respect of coconut cultivation, we had indeed some months ago evidence of progress in these remote North-Central districts which astonished us not a little. In answer to the call for information for our "Handbook and Directory," Mr. Ievers was good enough to send us a copy of his office list including no less than a hundred different gardens ranging from 2 to 40 acres in the Anuradhapura district. Returning to Kalawewa, we are apt to forget in the disappointment attending the recent monsoon, that in 1889, water was twice issued to fill the 80 village tanks down the course of the Yodiela as well as the large tanks near Anuradhapura. The result was that crops were successfully grown and reaped twice in that year in the connected fields, while the villages dependent solely on rainfall were not nearly so well off. We do not know exactly how the comparison applies for 1890, but we do know that Kalawewa is considered to have rendered good service more especially in filling Tissawewa; while it is most satisfactory to learn that Mr. Ievers,—a peripatetic Government Agent if ever there was one—is quite content that the irrigation policy pursued in the district (for which by the way he is not personally

responsible) should be judged by the experience of the next few years, without any further expenditure if so it please Government to decide. Mr. Ievers is confident of the results and of Kalewewa doing as much good as the best of the restored tanks in the Batticaloa or Matara districts. We had a striking testimony to the improvement in the outlying portions of the North-Central Province, from a comparison we heard made by an observer—not a revenue officer,—between the Northern division and the adjacent Wannī district where a vigorous Irrigation policy could not fail to change the condition of the people if not the face of the country.

In speaking of the irrigation wants of the Nuwarakalawiya district as being fairly well met (just as Mr. Murray gives up charge of the Public Works) we do not mean to say that there is no scope for improvement in other parts of the province. In Tamankaduwa, for instance, we have a large district bordering on Trincomalee and Badulla districts though included in the North-Central Province, where we are assured that there is room for conducting most profitable and successful cultivation through irrigation. The Mahaweliganga in this case supplies a perennial stream and a tank is not required, but rather an anicut which, we are told, could be constructed at moderate expense. That is a matter of course for future consideration. But certainly all this good news from Tissamaharama, from Batticaloa and the North-Central Province, affords strong justification for continuing to appropriate considerable Irrigation votes such, however, as can only be afforded through the continuance of the Paddy revenue. It is a most striking fact and one

that cannot be too often or prominently repeated,—that the only distress connected with the Paddy rent, of which agitators have made capital—has been confined to natives living in our planting districts, and that from the remote, purely native districts there is not a whisper of anything but satisfaction, progress and prosperity. Whatever mistakes therefore Sir J. F. Dickson made in Walapane and Upper Uva, could there be better evidence of the soundness of the general policy in native administration of Sir Wm. Gregory and Sir Arthur Gordon?

AGRICULTURE IN THE NORTH-CENTRAL PROVINCE—NOW AND IN ANCIENT TIMES.

It must not be supposed that our North-Central trip has given us an exaggerated or even a very great idea of what can be done in the immediate future in an increase of grain production, notwithstanding all the advantages the native farmers have had made available to them. If it took twenty years to realize the full benefit in the case of Batticaloa rice cultivators, even with the ready demand, and means of export by sea, for their surplus grain, the farmers of Nuwara-kalawiya can scarcely be expected to rise up as new men even in seasons when Kalawewa continues serviceable all the year through, or when village tanks are ready to make double if not treble crops feasible. Considering the climate and the comparative seclusion of the district, we may not even look for the development which has marked Tissamaharama—pronounced an absolute failure in 1879-80, and a great success

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 in 1889-90. What is the experience even of recent years of cultivators and landholders in these North-Central districts? The Matale division is close by where redemption of lands from tax, in order to have the less occasion for work, has not been uncommon. It is also on record on indisputable authority—that within the North-Central bounds, tanks have been seen full to overflowing without being utilized, because the farmers had so good a crop the season before, their granaries being full, that they thought it unnecessary to cultivate again, and were indeed quite willing to lose a season! It is well-known that Mr. J. F. Dickson and his successors had to exercise authority after a truly patriarchal fashion—had in fact to revive something like “*rajakariya*” to get the earthworks done on the thousand village tanks now duly banked, sluiced and in working order. It was absolutely necessary to deal with these secluded villagers as with children—to order and make them work for their own good. They see and reap the advantage now, and not the least benefit, we may hope, is the habit of industry which to some extent has been revived amongst them. We all remember the reproach brought against some North-Central Sinhalese in the past, that they were so lazy and well-off that they employed and paid Tamil coolies to do work which everywhere else in the island is done by the *goyias* themselves; and last but not least there was the Yodiela petition against Mr. Ievers—far more to his credit than the most brilliant address!—that he was insisting on the men taking their part in repairing the bunds and water-courses, work which had always been confined to their women and children. Here then is evidence of a conservatism in prejudice and practice which is probably

only to be thoroughly shaken out by the "era of steam" with its facilities for ready markets and the purchase of "Europe" goods, such as perhaps these remote villagers have never seen before.

Now, as regards the Nuwara-Eliya or Anuradhapura of a thousand or two thousand years ago: our visit to the district, and the grand view from Abhayagiriya of the expanse of splendid rich agricultural country dotted with tanks, has not altered our opinion of the comparatively limited population and outturn of grain, at any one date recorded for the district. In saying "comparatively," we are thinking of the absurd estimates of population which have come down to us in native traditions and of the still more outrageous reckonings which made "the granary of Ceylon" supply large quantities of rice to India. We have never accepted such statements. All authentic records are against their acceptance, and our columns have frequently afforded argument sufficient to show that whatever else Ceylon did she was never a grain-exporting country. Just as we are writing there comes an opinion from a keen observer with which we are inclined to concur and which we give here as bearing upon our subject:—

"The abounding fertility of immense expanses of paddy fields watered by the great tanks the vast population, the prosperous trade in exported grain, and the general wealth of ancient Ceylon, are mere myths, originating in the imagination of modern writers. It is ^{or} in, that the tanks were built at various times, ^{com}iding over more than a thousand years. It is ^{not} lly certain, that the whole of the tanks were ^{has} in operation at one time, and that the earlier ^{solu} in the midst of depopulated deserts for

ages, prior to the construction of the later ones. The countries with which the small trade of ancient Ceylon could alone have been conducted possessed then, as now, very much greater facilities for growing grain than Ceylon, with her costly artificial works. How could a country export grain, that had its chief centres of production far inland and did not possess a mile of road fit for a wheeled vehicle, and only a very limited river navigation? Fancy a great export trade in grain carried on by pingo loads, borne over jungle tracks from fifty to a hundred miles! As for the twelve millions, that have been named by someone as the probable population of the island, in its palmy days, there are far sounder reasons for believing that the island population never was so great as in the present year of 1891. We have no data whatever to aid our conjectures, but we know that from Matara to Puttalam, along the coast, the whole of the Central and Western Provinces, and the Jaffna Peninsula, have now a larger population than could possibly have lived in those regions at any antecedent period. We know that in all this region there is hardly an acre of land fit for producing paddy uncultivated; yet the average rice production of the island is probably under ten million bushels, but if Ceylon ever supported twelve millions of people, and had rice to spare for exportation, her average crops must have been at least from seventy to eighty million bushels, which is certainly very much more than she could produce if the tanks were all in perfect order and all the lands under them in full cultivation. If we take the yield of rice, per acre at thirty bushels, which is far more than the truth, it will take about 33,000 acres to each million of bushels. The area of the island is 15,809,000 acres: of this area not more than five

per cent could by any possible means be made paddy field; but supposing ten per cent to have been under paddy at one time and yielding thirty bushels of clean rice per acre, we have on 790,000 acres 23,704,000 bushels, which allowing five bushels per head of population would provide for 4,740,000."

Between 4 and 5 millions of people and 20 to 25 millions of bushels of rice are probably the maxima that have ever been reached by Ceylon in population and rice production. That is no reason, but the reverse, why we should not regard with the greatest possible interest, every effort made to promote the revival of native agriculture in long neglected districts. The margin is still a very wide one before the local production of grain overtakes local needs and obviates the necessity for any importation, and just as the Moormen and Tamils of the Eastern Province are now keenly alive to the value of their harvests and the money the surplus yields, so may we look forward to the time when the apathy of the farmers in the North-Central Province will be dissipated, and they will need not the slightest pressure in order to cultivate and reap as frequently and steadily as Providence and the Government Agent—that is, their tanks—will permit.

THE CONDITION OF THE KANDYAN SINHALESE 50 YEARS AGO:

SOME MORE FACTS FOR SIR ARTHUR HAVELOCK.

What the condition is of the natives in the highland portion of the Central and Uva Provinces in the present day, it is open to an energetic

travelling Governor to see for himself. Excursions can easily be made to the headquarters of Batemahatmayas or Kórálas and the adjacent villages and the state of the people judged by what is seen and learned.

For information as to the state of things in the same hillcountry of the Kandyan provinces fifty years ago—the period when some wild local critics would have us believe the people were better off than now,—we cannot have a safer judge than Major Skinner. He was a pro-native official if ever there was one ; he travelled through the country—the villages and jungle—more freely than any other man before or since his time and he was a keen observer. No one too saw more clearly the benefit which planting enterprise was bound to bring to the Sinhalese and Tamils. On the 11th August 1840, Major Skinner addressed a letter to Governor Stewart-Mackenzie begging permission to open a 5-feet bridle path between Kotmale and Balangoda so as to make known “the wilderness of the Peak” and the 200,000 to 300,000 acres of forest land lying idle there. In this letter he said a good deal about the country and people, and we call special attention to the passages we have italicised :—

“I trust your Excellency will excuse me if I am permitting myself to address you too freely on this subject: I feel intensely interested in it. Who can view this exquisite scenery, enjoy this perfect climate (at present the thermometer is between 67° and 68°) without feeling that it would be conferring a blessing upon humanity to be the means of removing some 20,000 of the panting, half-famished creatures from the burning, sandy plains of Southern India to such (comparative) paradise; benefiting not only them, the colony, the individual by means of whose capital they would be brought here,

but also our own native Singhalese people inhabiting the margin of this wilderness, living as they now are like monkeys, for safety compelled to hide in places scarcely accessible to man, to render their dwellings inaccessible to elephants. Many totally unable to cultivate a grain of paddy, or to procure a morsel of salt, would find themselves attracted to a new centre within this, at present, trackless wilderness, which (although I have often been jeered at for stating it), I advisedly repeat, is destined ere long to become the garden of Ceylon, such a garden as has not entered into the mind of us Pioneers to conceive—a garden of European as well as of tropical productions, peopled with European as with Asiatic faces.”

NOTES ON A TRIP TO ANURADHAPURA.

The trip to the “Buried Cities” has become so hackneyed that it scarcely warrants a special report nowadays. Still the latest experience may be of some use to intending visitors, and a few impressions of what was seen under specially competent guidance may be of interest to the general reader.

Leaving Colombo by the early train of Good Friday, we got to Matale without incident by the way, worthy of record, and in time for luncheon before starting by the two-horse coach along the North road. “The lang toon o’ Kirkaldy” to which Matale has always been likened, seems to get longer every year, and it shows signs of increasing prosperity and improvement in other ways. Thriving schools are to be seen, Reading Rooms and Book Depôts and other evidences that the rising generation are looked after. We had heard so much of the discomforts of coach travelling beyond

Matale that we were prepared for a much rougher experience than actually fell to our lot. The coach to Dambulla is exceptionally well horsed and fairly comfortable, at any rate for those who are fortunate enough to get the box seats, and so avoid the risk of being crowded inside. Why the proprietors of the horse coach do not run it all the way to Anuradhapura during "the season" at least, is what no visitor can understand. The roads are specially good, and the passenger traffic ample. We had taken the precaution to secure in the horse coach to Dambulla, two seats (for our party of two) a week beforehand, and also the whole of the bullock-coach between Dambulla and Anuradhapura. Two seats in the ordinary way cost for Europeans R12 from Matale to Dambulla, 29 miles; and R12 thence on to Anuradhapura, 40 miles. The whole coach from Matale to Anuradhapura is R35 which means only 3 seats for Europeans and one for a servant; while from Dambulla to Anuradhapura the whole coach is R20. These details may be useful. Altogether, our journey by coaches between Matale and Anuradhapura, cost R64 for 138 miles, against only R16.50 (excursion rate first class) for 196 miles by railway between Mount Lavinia and Matale!

One is apt to forget, amidst its modern surroundings, the ancient importance of Matale, the *Mahā-talawa* (the great plain 560 feet lower than Kandy) of the Sinhalese chronicles, once the seat of royalty and later a Principality. The drive out of the town as far as the North Matale group of estates is one of the most pleasant and picturesque of its kind in the island. It is one long avenue shaded by Liberian coffee, cacao, coconut palms or farther on by rows of the well-known "kapok" yielding cotton trees.

Aluwihara—once the scene of some of the richest coffee cultivation in the island—is passed on the left, and we note the huge rocks sheltering the caves which we explored with Mr. Alexander Ross many years ago. These caves are historically interesting as far back as King Walagambahu of 90 years before the Christian era; for here did the monarch call together the company of monks who for the first time transcribed Buddha's teachings, the language being Pali. Matale being 1,136 feet above sea level, the drive of 14 miles to Nalande, where there is a clean, prettily situated resthouse, involves a fall of 203 feet—and Dambulla, being only 533 feet altitude, we have another descent of 400 feet in the $14\frac{1}{2}$ miles to that terminus; but the fall is by no means a continuous, steady one, there being long stretches of a level or climbing road to alternate with the occasional steep descents. Some splendid tea-fields are passed near Kawdupelella, and farther north towards Nalande we come on an abandoned tea-clearing in which however the tea so far from being choked out is determined to form the jungle whatever the weeds may do for undergrowth. If only there were a sufficiency of rain, what splendidly rich flats for tea could be got on the borders of the Central and North-Central provinces, or beyond! Dambulla is reached at nightfall—too late to climb the rocks and view the cave or rock temples, a part of the programme reserved for our return. After some dinner, we started in the bullock coach which had been made fairly comfortable with planks, mattress and pillows so as to recline at full length. Still there is considerable room for improvement, especially in regard to the length of the improvised bed or couch which must be quite inadequate in many cases. Nevertheless our night journey from 8 p. m. to 5 a. m.

covering some 40 miles, cannot fairly be described as very trying. The roads were in splendid order, the bullocks did their work well, we had delightful moonlight, and notwithstanding the tinkling of bells round the bullocks' necks and the occasional blowing of a horn to warn "all and sundry" to clear the way for "Her Majesty's mails," we were able to sleep a good deal, and after a short rest at our destination, a bath and change, we felt equal to a day's march among the ruins notwithstanding the night journey. This should encourage ladies, seeing that a lady made this Friday night's journey and was able to go about all day Saturday in spite of a decidedly higher temperature than we are accustomed to in Colombo.

On leaving Dambulla, we felt we were fairly out on the Great North Road of the island, and as we passed over its long stretches of comparatively straight level gradients,—the fall is only 200 feet in some 40 miles—we could not help thinking of the suitability of the route for a steam tramway. The traffic in bullock carts is by no means a large or crowded one considering the long distances. There would be no risk therefore of steam proving an inconvenience in this region. No doubt the subject will be discussed in the Commissioners' Report on the Jaffna Railway now fully due.

We must not leave the impression, however, that the road between Dambulla and Anuradhapura is a very lonely one. We did not at all find it so; and coming back we had the opportunity of seeing more of it by daylight. There is a good deal of population, and the people seemed comfortable enough at such villages and stations as Madattugama, Elagama, Kekirawa, Maradankadawala, Periyakulam, Allitane, Tiripane and Galkulam; while

the fine iron lattice-bridges over the Dambuloya, Mirisgonioya, and Malwattaoya, besides that over the Nalandaoya, receive far less notice from the passing traveller than they deserve. Especially is this the case in the dry season when only tiny streams trickling far below the road-level are observed. If we passed in monsoon time, doubtless full and raging torrents reaching high up towards the bridges would cause the traveller to hold up his hands and bless if not the "General" at least the Governor under whose auspices they were "made" and placed where they are.

The Resthouses along this road are well-chosen for picturesqueness as well as convenience of situation. The country about Tiripane is very pretty—a picture of sylvan beauty, grassy parks and fields surrounded by forest.

ANURADHAPURA.

Our first introduction to Anuradhapura was in the early uncertain gleams of dawn and passing glimpses of great castellated masses towering far above the prevailing forest, imparted an air of romance and mystery which made us feel as we were entering a veritable fairyland. "More light" did not diminish the mystery nor yet dissipate the romance. The parklike domains surrounding the little town, the lakes, the forest drives, the palace pillars all made up a first impression that stirred the imagination in favour of the supernatural, save that with vegetation at its best, we felt that

So fair a scene, so green a sod,
Our English fairies never trod.

To descend to the practical, we may say that a very brief experience of the place made us realize that there was "no end to it"—that as respects

ruins and archæology, we might, if so inclined, copy the poor workwoman who—all her life working under hard competitive conditions, in a midland town—was so struck when she first saw the sea that she dropped on her knees and fervently thanked God that here at last there was one thing of which He had made enough for everybody! Of ruins, covered if not revealed, the Anuradhapura district—or let us say the North-Central Province including Polonnaruwa,—has surely enough for all the antiquaries in Europe even, if conveyed simultaneously to the spot. Like the young American after some days' hard work among the ruins in Rome, (or was it Florence?) one might almost say "What with sculptures and statues and pictures I'm gorged." Scarcely the pictures perhaps, although examples of painting are not wanting.

Our readers need not fear however, that we are going to enter into detailed descriptions of Dagabas, Temples, Pokunas, Palaces, Pavilions *et hoc genus omne*. These have been already so often and fully described by Tennent and other historical writers on Ceylon and made so freely and popularly available in Burrows' Guide supplemented as that now is, and will be, by Mr. H. O. P. Bell's successive interesting Reports, that description is the very least duty devolving upon us.

We shall only refer in the briefest and least technical way to what we saw in the course of our wandering for the three days we had to spare in the places. There is no more attractive sight in Anuradhapura than the view of the Thuparama Dagaba—the most ancient and handsomest of all, though one of the smallest—as seen from the verandah of the Government Agent's residence. A

wide grassy avenue has been cleared, the Dazaba bounding the one end, and the cluster of modern Government buildings not unpicturesque in their way amidst parklike surroundings at the other. A modern town with its Kachcheri, Court-house, P. W. D. establishment, Hospital, Resthouse, School, and Bazaars, we confess, looks out of place side by side or scattered amidst the many memorials of kings and priests reaching beyond the Christian era. But great taste has been shewn in utilising the open spaces, and in planting up grand shady and flowering trees—teak, mango, Inga saman, &c.—around the modern buildings, while the long bazaar is a model of neatness and attention to sanitation.* Anuradhapura, we suppose, may be said to be in the midst of a great plain and yet apart from the hill-like Dagabas, there are the bunds of Bassawakulam, Tissawewa and Nuwarawewa bounding the town to break the monotony ;

* The improvements in and around the town since Tennent's day, 44 years ago, must be immense to judge by his description of what he saw :—

"The solitary city has shrunk into a few scattered huts that scarcely merit the designation of a village. The humble dwelling of a Government officer, the pansila of the officiating priests, a wretched bazaar, and the houses of the native headmen, are all that now remains of the metropolis of Anuradha, the 'Anur ogrammum Regium' of Ptolemy, the sacred capital of 'the kingdom of Lions,' on whose splendours the Chinese travellers of the early ages expatiated with religious fervour. The present aspect of the place furnishes proofs that these encomiums were not unmerited, and shows that the whole area, extending for some miles in every direction, must have been covered with buildings of singular magnificence, surrounded by groves of odoriferous trees. It recalls the description of the palace of Kubla Khan,

"Where twice five miles of fertile ground,
With walls and towers, were girded round ;
And there were gardens, bright with sinuous rills,
Where blossomed many an incense-bearing tree,
And forests, ancient as the hills,
Emfolding sunny spots of greenery."

while the depression which now marks the bed of the Malwattaoya must enliven the scene when filled to overflowing by a grand rushing river in the wet season. Anuradhapura with an elevation of 312 feet above the sea (about the same as Rambukkana), and a rainfall averaging 54·50 inches spread over 100 days would be considered, to be very handsomely provided in any less hot and thirsty land. It gets nearly 20 inches more than Hambantota and is 15 inches better off than Manaar, while it has had a fall as heavy as 6·88 inches in 24 hours. The longest period of drought recorded in these modern days was 121 days in May-Sept. 1884, while Puttalam got a stretch of 146 in the same year, and Manaar on fewer than 159 dry days in 1887. Moreover, although the temperature as we found to our cost can run perhaps as high at Anuradhapura as anywhere in the island; yet the average *mean* temperature is very reasonable being 80·1 or a fraction less than Batticaloa, Trincomalee and Colombo; while nearly a degree and a half below that of Jaffna and Manaar. The last-mentioned station at a temperature of 81·5 has therefore the highest mean annual record of any place in Ceylon and probably in the civilised world.

To return from this digression on climate, natural enough in the case of Anuradhapura, we must needs recur to the Dagabas, and perhaps the quickest way to give our readers a summary idea of them is to reprint a tabulated statement which, rather curiously, Burrows neglects to place in his Guide-

book. The Anuradhapura Dagabas number seven and according to size * are arranged as follows :—

	Original height supposed.	Present height of Da- goba.	Dia- meter at base.	Dia- meter of bell.	Dats begun.	
	ft.	ft.	ft.	ft.		
Abayagiri	405	231	325	357	B. C.	89
'Jetawanarama	316	269	310	355	A. D.	302
Ruwanweli	270	189	379	288	B. C.	137
Mirisawetiya		82½	164	128	B. C.	161
Thuparama		62½	59	23	A. D.	276
Lankarama		32½	44	—	unknown.	
Sela Chaktiya	20	(in too ruinous a state to be ascertained.)				

Our first visit was to Ruwanweli (golden-dust) Dagaba, 2,050 years old, King Dutugemunu's greatest work as it has been called, although surely his irrigation undertakings in Kalawewa and Yodi-ela alone, are far worthier of exaltation than the Ruwanweli and Mirisawetiya Dagabas even if the Brazen Palace be also counted. It is interesting to mark the poor attempts at restoration or conservation on Ruwanweli which (unlike most of the other Dagabas) is in priestly ownership and care. The brickwork wall erected round the bell is visibly insufficient to withstand the pressure and may be expected to give way at certain points ere long. It presents a great contrast to the more scientific and permanent work constructed under P. W. D. direction for the Government on Abhayagiri and for the Siamese Prince by Mr. Murray on Mirisawetiya. The work on Ruwanweli is at present suspended for want of funds, until pilgrims supply the priest in charge with offerings abundant enough to allow a portion to be devoted to a continuance of his self-imposed task. We examined the gateway, pokuna, figures of Buddha,

* The dimensions here given differ very considerably from those given in our "Handbook and Directory."

double platforms, with friezes of lions and the still grander circle of elephants originally furnished, says the *Mahavamsa*, with tusks of real ivory : but are these, and many other points, not all excellently described in the chronicles of Burrows ? No doubt Buwanweli in all its early grandeur must have been a sight to cheer the dying monarch as he lay in his couch at a position opposite to it still pointed out, although Dutugamunu is said to have deprecated priestly adulation and exaltation in his last moments. The inner treasure-chamber of Buwanweli as of other Dagabas is frequently referred to and the desire to rifle these and indeed all the treasures connected with temples and palaces is given as the natural explanation of the destruction wrought by the Tamil invaders. But we find nowhere in Tennent or Burrows an adequate explanation respecting the sacred chambers containing these "precious treasures," the rifling of which most likely caused the demolition of a large portion of each Dagaba. From a paper locally published some years ago, we quote what might well be amplified into a supplementary chapter by Burrows, as describing the construction and probable contents of two classes of Dagabas :—

THE INTERIOR OF THE ANURADHAPURA DAGABAS.

The Dagabas of Anuradhapura, and indeed everywhere else, are divided into two classes, the greater, exclusively relic depositories, the lesser are all tombs. Of the latter very little can be said; all we know of them is that they were very small, and all have been demolished in order to rob them of such valuables as they were supposed to contain. I am of course now only speaking of Anuradhapura Dagabas. Recent excavations of some of these *Tomb Dagabas* show that they had the usual square platform or base, the sides

as exactly as possible facing the cardinal points, and the platform reached by flights of stone steps having stone wing walls finished off with the usual ornamental *dwaraka* slab or janitor stone. Sometimes there was only one flight of steps, sometimes two, and in a very few instances a flight of steps on each side. These steps with their corresponding wing walls and *dwarakas* were more or less elaborately carved in accordance with the importance of the person whose ashes were deposited in them. In all cases they were the ashes of priests or priestesses, and in most instances of such as had distinguished themselves as saints of the Buddhist faith. The construction of the domes or bells of these dagobas would appear, from the fragments of them found amongst the debris, as also from the foundations laid bare, to have been hollow and not solid brick throughout, as in the large dagabas. Nothing of the superstructure of these dagobas remains to show how the bell or domes were finished off, but judging from the description of dagoba at Mehintelle, eight miles to the east of Anuradhapura, which are of almost as early a period, and of ancient tomb-dagabas in other parts of island, they were very similar to the large dagobas with their square tees and spires. And now with regard to their internal construction. As stated above, the bell was in all these cases a true dome, a hollow structure, but as to whether there was any aperture or contrivance leading to the chamber thus formed, there is nothing to show that anything of the kind existed, and it is supposed there were no means of ingress and that like Dagabas at other places, they have none. This hollow dome was not the chamber in which the *ashes* of the deceased priest or priestess was deposited, but was really the antechamber of the tomb itself, which was immediately below it, the floor of the upper or dome chamber being level with the outside platform, and the lower or tomb-chamber being reached from it by a square aperture

nearly closed with a slab of stone fitting into it and flush with the ground. The lower chamber was square, the sides, like those of the platform facing the cardinal points, the corners being cut off as it were with monolithic slabs and very nearly coinciding with the inner circumference of the dome chamber above. The stone slabs alluded to as cutting off as it were the corners of this chamber were usually inscribed with the name of the person whose ashes were deposited there, and a few particulars with regard to his or her supposed good deeds, and then follow the usual ornamentation of Buddhistic emblems, such as the sacred feet of Buddha, the trident, sacred signs, sun, moon, &c., &c. Most of the inscriptions are not well executed, or have become much worn by time. In the centre of this apartment there was a square but sometimes circular stone pillar, a monolith rising about 4 feet above the ground and some 10 or 12 inches broad. On this the casket containing the ashes of the deceased rested. The height of this Chamber was from 7 to 8 feet high, but its breadth depended on the size of the dome above or perhaps, more correctly speaking, the size of the dome above depended on the size of the lower chamber it had to cover. To return the excavations of the Anuradhapura Tomb-Dagabas brought the fragments of some very interesting objects to light, but in none of these were any golden images of Buddha found, or indeed any images at all. These had been but too well rifled of their original contents for anything of much value to be found. In one of them was found the remains of the casket which had contained the ashes of the dead; it was broken into hundreds of pieces, but on putting some of them together it would appear that it had been in the shape of a dagoba carved from a block of pure crystal as clear as the most transparent glass, the centre being hollowed out to contain the ashes, the top consisting of another piece of crystal, carved to represent the tree and spire, fitting into the lower part as a stopper

would into the neck of a decanter. This crystal dagaba would appear to have been some 9 inches in diameter at its base and 14 or 15 inches high. Kings and others were not honored with cremation; kings were generally buried in stone coffins, the figure of the person to be buried being graved out from the solid block of stone, and the cover being a slab of stone cemented over the upper portion. The outside of the coffins were ornamentally carved. A few good specimens of these may be still seen in Anuradhapura, and one is pointed out as the coffin of king Dutugammunu, who reigned about two thousand years ago.

As to the internal arrangements of the large Dagabas—and these consist of all the Dagabas that are generally known as the Dagobas of Anuradhapura, those already alluded to being so small and in such a ruinous state that but very little remains by which their site is indicated. Unlike the smaller dagobas, the large ones have no chambers either below the platform or on the same level with it: they were built for a different object and on a far different principle. These were built to enshrine relics supposed to be of a most sacred character. These sacred relics were deposited in chambers constructed at the tops of these dagobas, and at a considerable elevation from the ground. The foundations of these dagobas were laid at a considerable depth below the surface of the surrounding ground, and if I am not mistaken nearly twenty feet have been excavated in depth through solid brick work without reaching the bottom of the foundation of one of the largest of these dagobas. All the lower portions of these vast structures, including more than three-fourths of the bell, were, throughout, solid brickwork; they contained no chamber or room of any description. The plan of construction would appear to be as nearly as possible as follows:—The position of the centre of the building was first fixed upon, the ground being of course cleared for the foundation; from this centre the squares

were then laid out, the centre being permanently fixed by an upright stone column accurately squared. The square of the platform and the outer square for the wall surrounding the building, was laid out from this centre, and the inner square built up to the level of the upper surface of the platform from which the circular Dagaba was to take its rise. As the square stone pillar in the centre was built up, another was accurately placed on the top of it, truly perpendicular, and securely fixed in position by mortice and tennon. In like manner the circles forming the outer rims for the *pasadas* or processional paths were laid out, and in like manner each course of bricks forming the bell or dome of the Dagaba. When the building reached to within something like 15 feet of the top of the dome the floor for the relic chamber was formed, and the square laid out for it, the walls of the chamber as in every other instance facing the cardinal points, and therefore being parallel to the sides of the large platform below. During the whole of the course of building upwards the stone column in the centre was added to till at last it protruded through the floor of the relic chamber, and as in the small tomb Dagabas, at the height of about four feet from the floor it terminated to form the resting place of the casket and in this case a square box-like receptacle of pure gold profusely set with precious stones. It is said that the stone column from the floor of the chamber was also overlaid with gold and supported a magnificent gold circular tray, upon which the casket containing the precious relic was placed. If all that is written of the precious things one of these sacred chambers was said to contain, each one must have been in itself a mine of wealth and little wonder that when the plundering Malabar invaders from the coast of India took possession of this once beautiful capital of a rather ancient kingdom, they soon found and forced an entrance into these depositories of riches.

There is a very interesting account in the Mahawanso and other historical records, of the relic being deposited amidst great pomp and popular rejoicings, in the sacred chamber of the Ruanwelle Dagaba by King Dutugummenu he is there represented as ascending by means of a winding temporary stair-case to the summit of the Dagaba, and that from thence he descended into the sacred chamber, all the way bearing the precious casket.

THE DAGABAS AND THEIR TREASURES.

With references to the account of "treasures" hidden in the Dagabas with which our instalment of notes closed yesterday, we may mention that some years ago Mr. Ievers explored the heart of Abhayagiri "the fortress of safety" which belongs to the Crown. He tunnelled into the centre, through 200 feet of solid brickwork (2,000 years old)—a most laborious operation. After reaching the centre and cutting a way into the supposed sacred depository, all that rewarded his enterprise were a few beads of no value save their historical interest.

Of all the Dagabas, Abhayagiri has perhaps most interest to the modern visitor, not because it was once the most stupendous of the series, but because the prisoners who were lately engaged in masonry work on the top, have left a means of ascent in steps along the side of the brickwork by which even ladies with fairly steady nerves can gain the crown of the mound and thence climb through the towers,—the modern restoration—by winding stair-cases until a height is gained of 231 feet above the platform, 540 above sea-level. Here, on the summit, a grand outlook over town and country is presented. Of its kind, the view is unique: not of life and activity such as added to the scenic show described

in well-known lines which we found ourselves repeating,—

Still on the spot Lord Marmion stayed,
For fairer scene he ne'er surveyed ;

But of a scene restful to the eye, beautiful in its way ; yet chiefly attractive for its historical interest. Our American cousins try to make up for the want of history or romance in the case of their great towns of the past half-century, by giving them names at once characteristic and descriptive. Thus San Francisco is the "Golden" or sometimes "the Bay Window City;" Chicago "the Prairie or Lawn City;" Baltimore "the Monumental City," New Orleans "the Crescent City," San Jose "the City of Gardens" and so on. The American visitor looking from Abhayagiriya across to its companion Dagabas, over the pillars of Brazen and Peacock Palaces, "the world of stone pillars," the forest-covered parks, the glistening tanks, and the wide-extending jungle to the far distant background of hills, might well speak of Anuradhapura, as THE MONUMENTAL, FOREST-SHADED CITY OF THE PLAINS in North-Central Ceylon. A setting sun lit up the scene and with the heights of Mihintale on the one side, far-distant Ritigala in front and the striking old-world tower of Jetawanarama behind us, all rising from a sea of forest, a panorama was afforded which must rest indelibly in our memory. A vision of mystery and romance in the presence of two thousand years of history responded to the outward picture and seemed to give us the gleam,—

The light that never was on sea or land.

But Tissawewa with its cheering, glistening sheet of water speedily conjured up more practical

thoughts. When the Kalswewa water-shed gets its proper supply and the Yodisala is in full play (not serving Anuradhapura alone but as Mr. Ievers has discovered, leading on far towards Manaar) how delightful to note as well the waters of Bassawakulam, in all their far-extending length and still more those of Nuwarawewa. In the monsoon season with the Malwatteoya running banks high and all nature refreshed and at its best, Anuradhapura may be placed above most other lowcountry towns in Ceylon, as enjoying

“the melodies of woods and winds and water.”

How strange that the splendour of this grand old capital, its many extensive tanks and wide fields should be forgotten by the native monarchs of Ceylon themselves, and to such a degree, that there is not even an allusion to Nuwarakalawiya and its towns in the style adopted by Wimala Dharma (in 1687) as King of Ceylon, discursive and comprehensive as his designations were in all conjuncture, thus :—

“Emperor of Ceylon—King of Cotta, Kandy, Sitavacca and Jaffnapatam—Prince of Oovah, Bintenne and Trincomalie—Grand Duke of Matelle, and Manaars—Marquis of Toompane, and Yatteneura—Earl of Cottiar and Batticaloa—Count of Matura and Galle,—Lord of the ports of Colombo, Obilaw and Madampe,—and Master of the Fisheries of Pearl.”

Getting down from Abhayagiri was not quite so easy as going up, a false step having doubly to be guarded against; but all agreed that the trouble of the climb and descent was well rewarded.

We may mention we saw Bassawakulam (the oldest tank in Ceylon) a little closer during our drive, with not much more than a big pool in its centre, in which however we counted some 24 dark objects marking the heads of as many crocodiles. That number however, is only a small proportion of

the hosts which haunt all the tanks in the neighbourhood.

We have already alluded to the restoration work on Mirisawetiya with the handsome brick arches constructed by Mr. Murray. These effect a great saving in labour and material, though perhaps the modern arches look a little incongruous far up the sides of King Dutugemunu's "chillies-sambal" Dagaba. We ought to dilate here on the beauty of the chapel excavated on the western side as a specimen of Singhalese architecture, but here again as for all the chapels round the Dagabas we cannot do better than refer to "Burrows," supplemented by "Bell."

Of the Jetavanarama as a dream of beauty with its forest-clad sides and old burntbrick tower, much might be written. One or two beautiful pictures of the scene hereabouts, we were glad to hear, have been recently painted by an English artist-visitor whose work may possibly adorn the walls of "The Academy" next year, doing justice in colour as well as form to what is by far the most attractive of the Anuradhapura Dagabas.

Not the least interesting visit of inspection was that to the Thuparama, the oldest and most venerated although the smallest of the Dagabas. Seeing that Fergusson pronounces this Dagaba "to be older than any monument now existing on the continent of India" (it was built by King Devanampiyatissa in B. C. 307 to enshrine the right collar-bone of Buddha) a special interest attaches to it. The platform and approach are at present in charge of an aged female devotee. The three rows of graceful pillars surrounding Thuparama are particularly striking, some of them being polished, a fact discovered of late

years by the P. W. D. architect, and we believe the only case in which such pillars have been found to be polished. Before leaving the Dagabas let us quote a sentence or two from Tennent in his final summing-up on the subject :—

“Such are the dagobas of Anarajapoor, structures whose stupendous dimensions and the waste and mis-application of labour lavished on them are hardly out-done even in the instance of the Pyramids of Egypt. In the infancy of art, the origin of these “high places” may possibly have been the ambition to expand the earthen mound which covered the ashes of the dead into the dimensions of the eternal hills, the earliest altars for adoration and sacrifice. And in their present condition, alike defiant of decay and triumphant over time, they are invested with singular interest at monuments of an age before the people of the East had learned to hollow caves in rocks, or elevate temples on the solid earth.

“For miles round Anarajapoor the surface of the country is covered with remnants and fragments of the ancient city; in some places the soil is red with the dust of crumbling bricks; broken statues of bulls and elephants, stone sarcophagi and pedestals, ornamented with grotesque human figures, lie hidden in the jungle; but the most surprising of all is the multitude of columns, the ‘the world of hewn stone pillars,’ which excited the astonishment of Knox when effecting his escape from captivity.”

OTHER SIGHTS IN THE “BURIED CITY.”

Time and space would fail us to put down the long list of further objects of greater or less interest, historically or architecturally, visited by us under such guidance as ensured that the vivid impression made on our minds will long remain. But in referring to these, we should only be

repeating what is readily available, or has been recently given in our columns. We should have to write of the original Dalada Maligawa, or temple of the tooth, Lankarama Dagaba, Dutugemunu's Tomb, the Queen's Palace (so-called), the enormous Pokuna known as the Elephant Tank, sedent Buddhas which seem to eye us from the sombre jungle, or from the ditch into which they may have fallen, the graceful stone Canopy discovered and erected under such interesting circumstances by Messrs. Ievers and Burrows within recent years, and near which Mr. Bell has been discovering and deciphering inscriptions of the time of Mahinda III. The enormous and curious monolithic stone Canoes, and the series of gigantic pillars which were supposed to mark the site of the King's Elephant Stables (in reality a durbar-hall or monastery) with the adjoining "Pavilion" and its most perfect "moonstone," and "door-guardian" stones — by no means however the King's Palace so long sought after and yet to be discovered. The Ruttam Pokuna or twin-bathing places farther on are specially interesting, one having its monolithic massive stone steps replaced in their original form by Mr. Ievers, while the other is left a picturesque ruin. Verily these ancient monks understood the philosophy of the bath and they took pains to be well and comfortably supplied.

We also visited the "Galgé" with its rock-cave hermit residences and near to which again Mr. Bell has done some interesting excavation work, though not equal to his grand find in the Buddhist monastery of the Abhayigiri fraternity with its unique, massive stone railing.

Of course, we visited the "sacred Bo tree," the descendant and representative no doubt of the original of 2,200 years ago—or it may be the

original, if de Candolle's theory be correct that trees do not die of old age, but if uninjured externally may go on without limit! Of its surroundings as of those connected with the Brazen Palace we spare description*. We gave more attention perhaps to "the Palace of the Peacock," the pillars of which stand next to the schoolroom used for service by the Church Mission. While waiting for Mr. Garrett on the Sunday afternoon, we had time to see what an excellent and airy place of assembly might be built over these pillars in place of the small confined room now available, and so with the Missionary (who gave us a most excellent earnest sermon), Government Agent, P. W. officer and Archaeologist all on the spot, we thought we could not do better than recommend the application of the voluntary principle to the construction of a commodious place of worship on the top of the ancient pillars which seemed so conveniently placed for such a building if only the Crown were willing to dispose of the allotment! The Church and Baptist Missions divide the work (in evangelisation and schools) from Kandy to Anuradhapura between them and Mr. Garrett and Mr. Lapham co-operate most cordially alongside of each other.

The rainfall and weather must have been a subject of constant interest in ancient Anuradhapura. What pains did rulers and priests take to conserve the precious water! Not simply are tanks in evidence on every side, but where else are there such a multiplicity of bathing establishments,

* A curious bit of modern Sinhalese work is visible near the inner series of steps (with their grotesque dwarflike figures) in an ancient inscription which has been built in *sideways* in the course of a recent native restoration of the wall!

"pokunas" of elaborate construction, of vast monolithic stones carefully placed at an easy angle for ascent or descent with occasional recesses and arrangements for shower baths which showed how well the old Buddhist monks understood comfort. Close by the Agent's grounds and Kaschoheri, fine specimens of these "pokunas" are being restored in order to be utilised by the people, the one for bathing and the other for drinking purposes now that Kalawewa and Tissawewa are likely to make a regular supply of water pretty certain. The water privileges of the 3,000 people—more or less according to the latest census—in modern Anuradhapura, are indeed to be very considerable, what with tanks as well as "pokunas" reserved for drinking or bathing purposes. Between two such minor tanks we saw Murray's economical cement sluices of different sizes in full operation, while the place of their manufacture a little farther on was full of interest as we inspected the various processes involved.

THE "VIA SACRA" AND MIHINTALE.

Leaving Anuradhapura on the Monday morning for Mihintale—not so early as we ought to have done—we passed close or at least parallel to the *via sacra* of the ancient Buddhist hierarchy along which so many thousands of royal and priestly processions—led by monarchs, marshalled by priests—passed from the great temple of the capital to the top of the sacred mountain with its 1,840 steps formed by King Maha Dailiya Mana A.D. 8. Tennent compares this road to the Appian Way between Aricia and Rome for its numberless traces of antiquity in monumental ruins now hidden by jungle. Mr. Bell is ambitious of tracing the route along which, 2,000 years ago, pious King Devanampiatissa sent

his chariot accompanied no doubt by many more to bring Mahindo to the "sacred city."

Passing out of the town we note the old Resthouse—the one described in Burrows' Guide by the way—now used for Gansabhawa meetings and as a native resthouse generally. Soon after we cross the Malwattaoya (the Kadamba of the *Mahavanso*) which played such an important part in the escape of poor Knox that it may be worth while repeating here the few sentences which the first Englishman who ever wrote about Ceylon, devotes to Anuradhapura and its neighbourhood :—

"The country of Neurecalava formerly brought forth great plenty of corn, occasioned by reason of its large waterings. A neighbour kingdom, the kingdom of Cournegal, which lies in Hotcourley, in those times was brought to a great dearth, at which the king sends to the people of Neurecalava, that they would bring a supply of corn to his country, which they did in great store upon beasts in sacks, and arrived at the king's city: and there, for the more expeditious measuring out every householder his proportion of corn, they made a hole in the sacks, and let it run out, still driving on the beasts before them; and all that was shed before every man's house, was to be his share. This exceedingly gratified the king.

"Afterwards, the king to requite them asked, what they most needed in their country? They answered, 'They had plenty of all things, only they wanted cahab mirris;' that is, turmeric and pepper. The king, to gratify them, sent them such a quantity of each as his country could afford. As soon as this was brought to the people of Neurecalava, they went to measure it out to every man his portion; but, finding it of so small a quantity, they resolved to grind it, as they do when they use it with their victuals, and put it into the river to give a seasoning to the water, and every man was to take up his dish of water thus seasoned.

From whence Neurecalava had its denomination, viz. from Neur, signifying a city, and oahah, that signifies turmeric; and alva, as if it were lalla, put into the river.

“The king hearing of this action of theirs, was offended in that they so contemned his gift, but concealed his displeasure. Some time after, he took a journey to them; and, being there, desired to know how their country became so very fruitful; they told him, it was the water of the river pent up for their use in a very vast pond, out of which they made trenches to convey the water down into their corn grounds. This pond they made with great art and labour with great stones and earth thrown up a vast length and thickness, in the fashion of a half moon. The king afterwards took his leave of them, and went home, and by the help of his magicians broke down this vast dam that kept in the water, and so destroyed the pond. And by this means this fruitful country, wanting her water, is become as ordinary land as the rest, having only what falls out of the sky. * * *

“But in our way before we arrived hither, we came up with a small river which runs through the woods called by the Chingulays, Malwat Oyah; the which we viewed well, and judged it might be a probable guide to carry us down to the sea, if a better did not present. Howbeit we thought good to try first the way we were taking; and to go onward towards Anarodgburro, that being the shortest and easiest way to get to the coast; and this river being just under our lee ready to serve and assist us if other means failed.

“To Anarodgburro therefore we came, called also Neur Wang, which is not so much a particular single town, as a territory. It is a vast great plain, the like I never saw in all that Island; in the midst whereof is a lake which may be a mile over; not natural, but made by art, as other ponds in the country, to serve them to water their corn grounds. This plain is en-

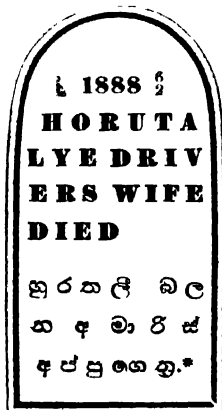
compassed round with woods, and small towns among them on every side inhabited by Malabars; a distinct people from the Chingulays. But these towns we could not see till we came in among them. Being come out through the woods into this plain we stood looking and staring round about us, but knew not which way to go; at length we heard a cock crow, which was a sure sign to us that there was a town hard by; into which we were resolved to enter for standing thus mazed, was the ready way to be taken up for suspicious persons; especially, because white men never come down so low. * * *

“There was only one great road in our way, which led to Portaloan from the towns which by and bye we fell into; this road therefore we were shy of lest when we passed it over, some passengers travelling in it, might see us and this road we were in expectance about this time to meet withal, secure, as I said before, of all other danger of people. But the river winding about to the northward, brought us into the midst of a parcel of towns called Tiseea Wava, before we were aware; for the country being all woods, we could not discern where there were towns, until we came within the hearing of them. That which betrayed us into this danger was, that meeting with a path, which only led from one town to another, we concluded it to be that great road above-mentioned; and so having past it over, we supposed the danger we might encounter in being seen, was also past over with it; but we were mistaken—for going further we still met with other paths, which we crossed over, still hoping one or other of them was that great road; but at last we perceived our error viz. that they were only paths that went from one town to another. * *

“The lower we came down this river the less water, so that sometimes we could go a mile or two upon the sand; and, in some places, three or four rivers would all meet together. When it happened so, and was noon, the sun over our head, and the water not running,

we could not tell which to follow, but were forced to stay till the sun was fallen, thereby to judge of our course. We often met with bears, hogs, deer, and wild buffaloes, but all ran so soon as they saw us; but elephants we met with no more than that I mentioned before. The river is exceeding full of aligators, all along as we went; the upper part of it nothing but rocks. Here and there, by the side of this river is a world of hewn stone pillars, standing upright, and other heaps of hewn stones, which I suppose formerly were buildings; and in three or four places are the ruins of bridges, built of stone; some remains of them yet standing upon stone pillars. In many places are points built out into the river like wharfs, all of hewn stone; which, I suppose, have been built for kings to sit upon for pleasure. For, I cannot think they ever were employed for traffic by water, the river being so full of rocks that boats could never come up into it."

After crossing the river by a substantial bridge, we came on the grand tank of Nuwara-wewa ("the city tank") with its substantial bund and scientific sluice arrangements, but, alas! presenting a vast expanse of grass and sedge rather than water. Mr. Levers is hopeful, however, of Kalawewa benefiting even Nuwara-wewa by-and-by. Our attention was here called to a modern memorial stone erected at the side of the road close to the tank which deserves to be immortalized as much as the famous one in Pickwick. Mr. Bell has sent us the inscription on it as follows:—



* Meant for ^{the} wife. The Sinhalese reads "Hura-tail Balana Anuaris Appugé stri."—B.

It was too late by the time we got to the Mihintale resthouse to attempt the ascent before breakfast and so we had to prepare for the climb during the hottest hours of the day. It is perhaps the first time on record that a European lady (who was of the party) has ventured up and down Mihintale—said to be a thousand feet above sea-level—between 1 and 3 p.m. The climb or rather walk up the steps is, in the early morning or late afternoon, a comparatively easy one, but the heat in the early afternoon of the sun in its strength and reflected from the thousand steps as well as from many monumental stones and rocks around, was an experience to remember, though fortunately no harm came to any of the party. For descriptions of the Rock Inscriptions, the Caves, Pokunas (the Naga Pokuna especially), Terraces, the Etwehera Dagaba on the top and farther on the Rock Temple, the Ambastala Dagaba—the meeting-place between the Buddhist emissary Mahindo and his royal convert Devananpiyatissa, we are fain to refer to Burrows. Never was “the shadow of a great rock in a weary land” more welcome than was the shady side of the dagaba about 2 p.m. nor young coconuts more refreshing than those got from the priest’s attendants lower down. Here we sat under the shade of a palm grove interspersed with a tree bearing a gorgeous yellow flower which being the “Kiniberiya” of the Sinhalese is, as we see from Dr. Trimen’s list, the *Cochlospermum Gossypium* of botanists. But the historical interest of Mihintale is a far greater attraction than anything visible in its ruined temples or inscriptions. We are standing on what is undoubtedly the most ancient scene of mountain worship in

Ceylon, a spot venerated by the Sinhalese long before the discovery of Buddha's (or Adam's) footprint was made on Adam's Peak. Tennent gives the height of Mihintale as over 1,000 feet, and speaks of it as a mountain carved into a temple, while Sigiri is a hill scarped into a fortress. The view from the top of Mihintale is undoubtedly very fine, although we had no evidence of its extending from sea to sea as some writers describe it. We had through one ancient doorway, a marvellous outlook over the ancient capital eight miles off, with its Dagabas, especially the tower-crowned and forest-clad Jetawanarama, framed in a picture of exceeding beauty—a view which we were not surprised to learn had been specially selected by Miss Shaw Lefevre (Lady Gordon's sister) for an oil-painting which she executed during her visit. Standing on such a point, it was impossible not to think of the scene presented 1,900 years ago when the King caused the Etwehera Dagaba (covering a single hair from the forehead of Buddha!) to be enveloped in a jewelled covering ornamented with pearls, while he spread a foot carpet from Mihintale to Anuradhapura that pilgrims might proceed all the way with *unwashed* feet! The view over the country generally has an interest of its own—we look across a sea of jungle intersected with open green or glittering spaces, marking the village or larger tanks, eastward towards Trincomalee, southwards over Tamankaduwa, westward across Anuradhapura and northward towards the Wanni. Not many eminences are to be noted in the North-Central province or neighbour-

hood, and the following list compiled from our "Handbook" may be of interest:—

	Altitude ft.	Situation.
Mihintale Basaar	370·9	Province.N.-C.
Iriyaperiyakulam	431·5	35 miles north of Anuradhapura.
Issembessagala	531·4	16 miles north-east of Anuradhapura.
Pidawila	635·8	17 miles west of Dambulla and in Nikawaganpaha Korale N.-W. Province.
Andiyagala	675·7	24 miles west of Dambulla and in Hatalapaha Korale of the N.-W. Province.
Mayilakanda	... 707·8	21 miles south-west of Anuradhapura.
Manakanda	... 807·2	N.-C. Province.
Ellagamuwa	... 856·7	8 miles north of Dambulla.
Puthiyankulam	... 881·9	2 miles east of the 124th milestone on the road from Jaffna to Dambulla.
Gatalagama	... 1090·1	10 miles south-east of Anuradhapura.
Dambulla Rock	... 1118·0	Dambulla near Resthouse.
Sigiri Rock	... 1144·6	Near Dambulla.
Baniyakanda	... 1986·6	6 miles south-west of Dambulla.

Looking over a wilderness of jungle like that seen from the top of Mihintale, we can realize how vast is the reserve of untouched forestland in Ceylon. No doubt we have all degrees of timber and it is interesting to note in connection with Major Skinner's "connaught" what the several native terms for different kinds of jungle are. Thus "Namadilla" is chena of one year's standing, the crop being reaped in February; "Kanatta" is chena jungle 4 to 5 years old, the crop reaped in August; "Chena" proper is jungle of 20 years' standing and "Mukalana" is proper forestland. Our

descent from Mihintale by another and winding route through the forest, taking us by the King's Bath with its handsome lion's head spout and other carvings, by ancient caves with their inscriptions high and perpendicular enough to make the service of taking "squeezes," a work of some risk for the archæologist, was all full of interest. By-and-bye we took leave on the main road of our courteous and competent guides and getting into the comfortable bullock-cart so kindly lent to us, we were soon trotting off towards Tiripane on our homeward journey along the North road. As the afternoon and evening closed in, we were able to understand what we had so often read of the solitude of our Northern jungles and in our resting-place beside the bed of an old tank, we began to appreciate though only to a limited extent what Tennant writes of a somewhat similar scene :—

"There is something solemn and impressive in the majestic repose of these leafy solitudes, where the deep silence is unbroken, except by the hums of innumerable insects, whose noises, though far too fine and delicate to be individually audible, unite to form an aggregate of gentle sounds, that murmur softly on every side, and produce an effect singularly soothing and dreamy.

"The trees are covered with birds of gorgeous plumage pea-fowl sun themselves on the branches, and snowy egrets and azure kingfishers station themselves lower down to watch the fish, which frequent these undisturbed pools in prodigious numbers. The silence and stillness of these places is quite remarkable; the mournful cry of the waterfowl is heard from an incredible distance; and the flash of a crocodile as he plunges into the stream, or the surprise of a deer, when disturbed at his morning draught, he

"Stamps with all his hoofs together,
Listens with one foot up lifted,

and breaks away to conceal himself in the jungle, cause an instant commotion amongst the fishing birds and cranes; they rise heavily on their unwieldy wings, and betake themselves to the highest trees, where they wait for our departure to resume their patient watch upon the mangroves."

We had a very amusing account from Mr. Garrett, the devoted, lively and warm-hearted Church Missionary, who caught us up at Tiripane, and afterwards travelled with us from Dam-bulla to Kandy, of some of his native experiences in the North-Central province. We should like to have seen the Assistant Agent (Mr. Helling) holding a levee at Mihintale attended by a host of poll-tax payers, some 200 of whom would fain plead off the burden—"age" or "tender youth" or "chronic rheumatism," &c., being among the excuses. Mr. Garrett's familiarity with an Irish crowd and its appearance before and after a "rent" or "taxing" ordeal, enabled him to depict the appearance and amusing attempts at deception, to the life. It was satisfactory to learn that not one of those who tried to get off and who were condemned to pay by the imperturbable chairman, failed to discharge his debt while they were all very good humoured over the matter. It was further interesting to learn on the authority of the Government Agent himself that there are far fewer Road Ordinance defaulters in proportion to those liable to the tax, in the so-called poor, remote North-Central, *than in the rich Western, Province!*

One of the incidents outside must be mentioned: Mr. Garrett got talking to the people; a young Buddhist priest also began to speak or preach. Some good-humoured conversation arose between Missionary and priest—and the latter at last rather trucu-

lently challenged Mr. Garrett to shew the people how they need not pay their tax. The Missionary said he could not do so. The priest said he could, and eventually called out:—"Put on the yellow robe and then you will have no tax to pay." Mr. Garrett quickly made his point even on the low ground taken by the priest. Illustrating by the nearest countryman he said: "You own a bullock worth £2, you have some goats, and a cart and are you going to give up £3 for the sake of paying 3s?" "No indeed," was the reply, and there was a general laugh at the expense of the priest.

It is a curious fact that while oranges and limes are not unknown, there are no pine-apples grown in the North-Central province, and the name seems almost unknown to the people, for in the case of a wild screw-pine growing over some rocks, a Sinhalese boy called them "ansi" in place of the usual "annási." Near the Mihintale resthouse we were interested in a small plantation of "Nux Vomica" trees, the crop of which was, a short time ago, gathered and despatched to Colombo by the Forest Department. The people generally do not know much about tea, but it is drunk regularly in the temples and by headmen as well as at the resthouses. An intelligent Kóála informed us that 6d to 9d per lb. was the price paid by the priests for their tea.



APPENDIX.

No. I.—(*See page 26.*)

THE AMERICAN MISSION AT BATTICOTTA :

Batticotta, Sept. 19th.

DEAR SIR,—We were interested in the letter about Jaffna, and thank you for speaking so appreciatively of our work : but the figures of students may be misunderstood ; so I should be glad if you would publish the accompanying notice.

The number of students you mention in your letter concerning Jaffna is liable to be misunderstood unless more details are given ; therefore kindly allow me to supply the details. We have at present at Batticotta 9 students in the Divinity Class, 76 in the College, 250 in the English school, and 115 boys and 50 girls, in the two vernacular day schools, making a daily attendance of over 400 on these premises.

If we include all the schools under my management in the Batticotta district, the number of children is 1,338, besides 1,189 on the islands.—

Yours truly,

S. W. HOWLAND.

No. II.—(See page 27.)

To my readers specially interested in Missions in the North and East, I commend a perusal of Mr. Wm. Walker's recent pamphlet (a copy of which can be got for the asking at the *Observer* office*) and with reference to my remarks on the "God's acres" of the American Missions, I cannot do better than quote Mr. Walker's closing sentences:—

"Sir William W. Hunter, in his address before the Society of Arts, spoke with feeling and with true eloquence of the *Campo Sancto* at Serapore, where lie the remains of the three great pioneer missionaries of India; and I cannot help thinking that Jaffna has got its *campo sancto* too. There rest the remains of the venerable 'Father' Spaulding, whose term of service was about 54 years; of Mrs. Spaulding, whose term was 55 years; of Miss Agnew who was head of the Uduvil Boarding School for about 43 years; of Mrs. Howland who wrought with her husband for nearly 43 years; and of Dr. Poor who did most efficient work for 40 years. These were all of the American Mission, and they now rest from their labours among the people in whose service they spent their lives. And at Nuwara Eliya lie the remains of Padre Oakley of the Church Mission, after 51 years of continuous service. I was at Nuwara Eliya when the good old man died, and was witness to the fact that all classes—Buddhist, Hindu, Mohammedan, as well as Christian—mourned for him. Such lives cannot have been wasted or 'cast as rubbish to the void.' They must have helped the native peoples to believe, first, in their teachers, and, next, in the Christ for whom the teachers spoke."

* A Glimpse of Mission Work and Mission Schools in Ceylon, with a letter to W. S. Caine, Esq. M.P., by William Walker, Glasgow, and Colombo, Ceylon. London. National Temperance Publication Depot, 39, Paternoster Row, E. O. Glasgow. David Bryce & Son.

No. III.—(See page 27.)

THE STORY OF ELIZA AGNEW IN CEYLON.

[Having heard Miss M. W. Leitch, in London, tell the following story of the marvellous work done by Miss Agnew, in the school where the Misses Leitch became her successors, I besought Miss Leitch to furnish the narrative for the Review, which she did, sending me the advance sheets of her forthcoming book, "Seven Years in Ceylon."—A. T. PIERSON in "*Missionary Review of the World*."]]

ELIZA AGNEW, OR ONE WOMAN'S WORK IN THE
FOREIGN FIELD.*

One day the teacher in a day-school in New York City, while giving a lesson in geography, pointed out to her pupils the heathen and the Christian lands, and she must have spoken some very earnest words to them, for then and there a little girl, eight years of age, named Eliza Agnew, resolved that, if it were God's will, she would be a missionary when she grew up, and help to tell the heathen about Jesus. She never forgot this resolve. Until she was thirty years of age she was detained at home, because there were near relations who needed her care. But when she had reached that age, and her dear ones had been called away from earth to heaven, she was free to leave her home, and she went as a missionary to Ceylon.

Some years before this, when the first missionaries reached North Ceylon, they could not find among the more than 300,000 people there, a single native woman

* This is a chapter from the Misses Leitch's new book: "Seven Years in Ceylon; Stories of Mission Life" with portraits and many illustrations, a handsome quarto of 170 pages, published by S. W. Partridge & Co., 9, Paternoster Row, London—a cheap and delightful gift book.

or girl who could read. There were a few men and boys who could read, but the people did not think it worth while to teach the girls. They said, "What are girls good for, excepting to cook food?" etc. "Besides," they said, "girls could not learn to read any more than sheep." The missionaries said to them, "You are mistaken. Girls can learn to read as well as boys." So they opened mission day-schools, not only for boys but for girls also.

Though the parents willingly allowed their sons to attend these schools, they were very unwilling to let their daughters remain long enough to receive an education, as it was common for parents to give their daughters in marriage when they were only ten or twelve years of age. Seeing this, one of the missionary ladies wished to commence a boarding-school for girls. She wished to have the native girls separated from the influences of their heathen homes, and brought under daily Christian influences. But none of the people would send their daughters to her.

One day there were two little girls playing in the flower-garden in front of the missionary's house at Oodooville. Ceylon is in the tropics, only nine degrees north of the equator. In North Ceylon there are two seasons, the *wet* and the *dry*. The dry season lasts nine months, and during that time there is scarcely any rain; but in the wet season, November, December and January, it rains nearly every day, and sometimes the rain falls in torrents—between nine and ten inches have been known to fall in twenty-four hours. While these two little girls were playing, there came on a heavy shower of rain, and as they had not time to go home, they ran for shelter into the missionary's house. It continued to rain all that afternoon and evening, and the little girls became very hungry and began to cry. The missionary lady gave them bread and bananas. The younger girl ate but the older girl

refused to eat. After a time, when the rain ceased a little, the parents went to look for their daughters. They had supposed they would be in some neighbour's house, but found them in that of the missionary. When they heard that the younger one had eaten, they were very angry, for they said, "She has lost caste." They found fault with the missionary lady, and the mother said, "You have given my child food, and it has broken caste and is polluted, and now we shall not be able to arrange a marriage for it. What shall we do? You may take the child and bring it up."

The missionary lady had been wishing for native girls to come to her, whom she might educate in a boarding-school, and here was a mother actually saying she might take her daughter, so the missionary lady thought that perhaps this was the Lord's way of enabling her to start the boarding-school. She took the little girl, fed and clothed her, and began teaching her the 247 letters of the Tamil alphabet. She sprinkled a little sand on the floor of the veranda, and taught the child to write letters in the sand. By-and-by, some of the playmates of this little girl came to see her, and when they saw her writing the letters in the sand, they thought that this was some kind of new play, and they also wanted to learn. The Tamil children have good memories, and in a very short time they committed to memory the 247 letters of the alphabet, and were able to read. Their parents, seeing this, and that the girl was well cared for and happy, soon began to entrust more of their daughters to the care of the missionary lady. This was the beginning of the Oodooville Girls' Boarding-School, which was, perhaps, the *first boarding-school for girls* in a heathen land, having been commenced in 1824.

After Miss Agnew went to Ceylon, she became the head of this boarding-school. She remained in Ceylon

for 43 years without once going home for a rest or a change. When friends would ask her, "Are you not going to America for a vacation?" she would always reply, "No; I have no time to do so. I am too busy." Through all those 43 unbroken years, during which God granted to her remarkable health, she was too busy even to think of going home.

In the Oodooville Girls' Boarding-School she taught the children, and even some of the grandchildren of her first pupils. More than 1,000 girls have studied under her. She was much loved by the girls, who each regarded her as a mother, and she was poetically called by the people "The mother of a thousand daughters." During the years she taught in the school more than 600 girls went out from it as Christians. We believe that no girl, having taken its whole course, has ever graduated as a heathen. Most of these girls came from heathen homes and heathen villages, but in this school they learned of Christ and of His great love, and surrendered their young hearts to Him.

Miss Agnew lived with us in our home the last two years of her life, when she had grown feeble and was no longer able to retain the charge of the boarding-school. We felt her presence to be a daily blessing.

Near the close of her brief illness, and when we knew that she had not many hours to live, one of the missionaries present asked her if he should offer prayer. She eagerly assented. He asked, "Is there anything for which you would like me specially to pray?" She replied, "*Pray for the women of Jaffna, that they may come to Christ.*" She had no thought about herself. All through her missionary life she had thought very little about herself." Her thought was for the women of Jaffna, that they might know Christ; that they might know that in Him they had an Almighty Saviour, a great burden-bearer, a friend that sticketh closer than a brother, one who had

borne their griefs and carried their sorrows and could give their troubled, hungry, sorrowing hearts His own peace. At the very time when she was asking prayers for the women of Jaffna, every room in our house was filled with native Christian women who, when girls, had been her pupils, and they were praying for her—that if it were the Lord's will to take her then to Himself He would save her from suffering and pain. God heard their prayer, and she passed away like one going into a sweet sleep. The attendance at the funeral service was very large. Many native pastors, catechists, teachers, lawyers, Government officials and others, the leading men of Jaffna Peninsula, who had married girls trained in the Oodoo-ville Girls' Boarding-School, came to the funeral service, bringing their wives and children. As we looked over that large audience and saw everywhere faces full of love and eyes full of tears, and knew that to hundreds of homes she had brought the light and hope and joy of the gospel, we could not help thinking *how precious a life consecrated to Christ may be.*

In hundreds of villages in Ceylon and India there is just such a work waiting to be done by Christian young women as that which, with God's blessing, Miss Agnew accomplished in the Jaffna Peninsula. Heathen lands are open to-day as they have never been open before. The women of heathen lands need the gospel. The stronghold of heathenism is in the homes. Many of the men in India have to some extent lost faith in their old superstitious creeds, but the women, who are secluded in the homes, cling to the heathen worship. What else can they do? They must cling to something, and the majority of them have not heard of Christ. They are teaching the children to perform the heathen ceremonies, to sing the songs in praise of the heathen gods, and thus they are moulding the habits of thought of the coming generation. Some one has truly said, "If we are to win India for Christ, we must lay our hands on the hands that rock the cradles,

and teach Christian songs to the lips that sing the lullabies, and if we can win the *mothers* of India to Christ, her *future sons* will soon be brought to fall at the feet of their Redeemer."

There are in India 120 millions of women and girls. How many lady missionaries are there working among these? In the report of the last Decennial Conference the number is given as 480, counting those of all Protestant missionary societies. Might not more be sent to that great work? We are told that there are a million more women than men in Great Britain. Could not many of these be spared from their homes, and could not some possessed of private means go on a self-supporting mission to this great field?

Think of the 21 millions of widows in India. What a terrible lot is theirs. They are regarded as under a curse. They are doomed to innumerable hardships. It is deemed meritorious to heap abuse upon them. It is thought the gods are angry with them and that the death of their husbands is a punishment on them for some sin committed either in this or in some previous life. Their lot is so hard to bear that again and again they have said to the missionaries, "why did the English government take from us the right to be burnt on the funeral pyre with our dead husbands, for that were better than what we have to endure?" But Christian women could give to these widows of India the gospel with its message of hope, and before the brightness of its shining the darkness of their despair would flee away. The knowledge of the love of Christ would help them to bear their otherwise intolerable burdens. Let us remember that Christ has told us that whatsoever service we render to the least of His little ones, He will regard it as done to Him, and whatsoever we leave undone of that which was in our power to do, He will regard the neglect and slight

as shown to Him. *Are there not many in darkness today who might have had the gospel had Christians done what they could for them?*

Failure to realize responsibility does not diminish it. Zenanas which forty years ago were locked and barred are today open. Especially is this the case in towns where there are Christian colleges. Wherever the Hindu men have been educated in these mission colleges, they are now willing, and even desirous, that their wives, daughters and sisters should be taught. We have been told by Hindu gentlemen that there are many educated men in India today who are convinced of the truth of Christianity, and would confess Christ were it not that a wife or mother, who has never been instructed about Christ, would bitterly oppose their doing so.

Shall not Christian women who owe so much to Christ be foremost in doing the work allotted to them? What a consummate blunder to live selfishly in this generation! Are we giving the best we have to Christ and to His cause? Christ says, "whosoever he be of you that forsaketh not all that he hath, he cannot be my disciple." Did Christ only mean that for those who lived hundreds of years ago, or does He mean those words for us today? In the presence of a thousand million heathens and Moham-medans needing the gospel, with multitudes in heathen lands losing faith in their old beliefs and asking for the new, does he not mean those words today? Does He not ask that our time, our money, our influence, our friendships and our *entire possessions* should be laid at His feet, consecrated to His service, placed absolutely at His disposal? Opportunities such as we have today, if neglected, may not come again.

It is said that when the decisive hour in the battle of Waterloo came, the English troops were lying in

the trenches waiting for the onslaught of the enemy. They had been ordered not to fire until the French were close upon them, and while they lay there in silence, Wellington rode up and down the lines, saying over and over again, "What will England say to you if you falter now?" One old officer declared that he said it a thousand times; but it is no matter how many times he said it, it was burned into those waiting troops till they felt as if they were lying under the very walls of Parliament, and when the command was given, "now up and at them," every man felt that the honor of England was in his hands; and he was invincible.

Do we not hear the voice of a greater Leader saying, "Be thou faithful unto death, and I will give thee a crown of life"? What will the result be if we falter now, if Christians are worldly now, if they are Christians only in name but not in deed, if they only say "Lord, Lord," but do not the things which Christ says? What will Christ think of us if we are not brave and true now?

Let us, at Christ's command, be ready to go forward, for the battle is not ours, but Christ's. Surely we will do well to place ourself on His side; for we know that in the end His cause shall prevail. We know that all darkness and every evil thing shall be swept away, and that the kingdoms of this world shall become the kingdoms of our Lord and of His Christ. Lord Northbrook recently, at the meeting of the Church Missionary Society, referred to His feelings at hearing Handel's "Hallelujah Chorus" sung. He said it was not so much the music as the words and thoughts that thrilled him. The greatest of all musical creations was inspired by the faith that from sea to sea, and to the ends of the earth, His dominion shall extend, and that from every part of this earth shall yet arise the choral shout, "Hallelujah, for

the Lord God Omnipotent reigneth." That is the grander chorus, of which Handel's Hallelujah is but the faint and distant anticipation. It will combine the voices of all loyal, loving saints of all ages, nor is there in all the world, in the obscurest hovel of poverty, one humble soul that prays "Thy kingdom come," that lays consecrated offerings on the altar of missions, who shall not join that final anthem as one who has helped forward the great consummation.

No. IV.—(See page 52.)

THE REVIVAL OF THE MANNAR DISTRICT.

(From the "*Ceylon Observer*," Oct. 7th.)

To the Editor,

Mannar, Sept. 25th.

SIR,—Your note to "Nimrod's" letter in your issue of the 12th inst. calls for grateful thanks from the people of Mannar district. Allow me to add one further consideration. When the Giants Tank is in working order, and the branch railway line runs through Mannar, the Mantottai district will resume its ancient grandeur as the "Emporium of Ceylon" which it once was if Casie Chetty was correct. Its hundred and odd abandoned villages and tanks, and the existence of numerous feeders connecting one tank with the others, attest to its past prolificness. The ancient temple of Sirukechurm, and the vast city attached to it, now mounds of *débris*, supports the fact.—Yours truly,
P.

Our correspondent "P." anticipates that "when the Giant's Tank is in working order, and the branch railway line runs through Mannar, the Mantottai District will resume its ancient grandeur as the 'em-

porium of Ceylon.' " While not sanguine of such a return to "ancient grandeur," we sincerely hope that a revival of this district will take place, and that it will once again teem with population as in days of yore. "P." misquotes Casie Chetty, who states in his *Gazetteer* that the island of Mannar was in early times "the emporium of Mahomedan commerce." James Steuart, in his "Notes on Ceylon" (1862) combated at some length Tennent's view that Galle was the "Tarsbish" of the ancients, and quoted from Bertolacci in support of his own belief that it was on the coast of the Mannar district that the emporium was situated. Whether this theory be correct or not, there can be no doubt that the Mannar district has a famous history, Mantottai being the Mahatittha of the Sinhalese chronicles, the port whence and whither the stream of intercourse between Ceylon and India went and came. The temple of Tirukesaram (or more correctly Tiruketisvaram) mentioned by our correspondent is one of the 1,008 sacred places of the Hindus, the only other in Ceylon being at Trincomalee. The ruins of this temple formed the subject of a paper by the late Mr. Boake, c.c.s., printed in the C. B. B. A. S. Journal for 1887, with remarks by the Hon. P. Ramanathan, to which we would refer those who wish to know more of it. Mr. Ramanathan disputes the identity of "Mantottai" with "Mahatittha," and explains the former name as "the great garden," a name alluding to the fertility of the district, and curiously coincident with the Sinhalese name of the Aruviraru, which runs through this region, viz., Malwatuoya. The late Mr. Boake, c.c.s., in his monograph on Mannar, gives interesting information as to the

history &c. of this district; and Mr. Henry Parkes, in his "Report on Irrigation in the Mannar District," issued as a Sessional Paper in 1880, gives valuable details respecting its geological aspect, the rivers that run through it, irrigation works, productions, &c. We quote the concluding paragraph of this report:—

"It is at present impossible to say whether the district was ever cultivated by the aborigines, though it seems not improbable; but it is obvious that the whole neighbourhood must have been thoroughly known in the first 300 years of Ceylon history; and in view of the facts that the great roads to the capitals passed through it and the sites of the pearl and chank fisheries were in it, in addition to the large natural salt-pans; that the city of Upatissa Nuwara, 'which had well-arranged markets, which was prosperous, opulent, large, charming and lovely' in the fifth century B. C. was only a few miles away; and that in those days the plain offered unrivalled facilities for paddy growing, it may safely be concluded that at least a part—and in all probability a very great part—of the land was under regular cultivation before the second century B. C." In 1881 Mr. Parker wrote an elaborate report on the proposed restoration of the Giant's Tank, illustrated with a coloured map of the Mannar District showing the natural features and the various tanks. We noticed fully and quoted largely from this report at the time that it appeared, so that we need only mention that he expressed himself strongly in favor of the restoration of the gigantic irrigation work, and brought forward facts to show that the result of such a restoration would be to cause the district once more to "blossom as the rose." May this vaticination be a correct one, and may "P." live to see it !

No. V.—(*See page 72.*)

THE MAHAWELIGANGA EXPLORED FROM TRINCOMALEE IN 1832.

EXTRACTS FROM THE JOURNAL OF AN EXCURSION TO EXPLORE THE MAHAVILLAGANGA, UNDERTAKEN UNDER INSTRUCTIONS FROM GOVERNMENT, BY B. BROOKE, ESQ., MASTER ATTENDANT OF TRINCOMALEE : BY DIRECTION OF GOVERNOR SIR B. W. HORTON, BART.

(*From the "Colombo Journal," Feb. 13, 1833.*)

On tracing the Mahavillaganga on the present Maps of the Island, it will be perceived that its stream divides itself near the sea into two branches. The smaller branch called the Virgel, falls into the sea 22 miles south to Trincomalie. The larger runs into the great bay of Trincomalie, and retains the name of the river. It would be imagined from this circumstance, that this branch was the principal outlet, but such is not the case: for by the Virgel alone does the river seek a passage to the sea, except in the month of January and during the freshes, when the other branch also affords an outlet to the parent stream. This is a remarkable fact, the cause of which I had never been able to discover: for no dependence can be placed on the contradictory statements of the people of Trincomalie, who evince remarkable ignorance on this subject.

The river from its mouth to Goorookelganga, a distance about 20 miles, is well known. I therefore resolved to commence from this place, and having despatched two canoes thither, I set out by land and arrived at Goorookelganga on the 29th of February, 1832. I found that my people had frequently been obliged to drag the canoe a considerable distance over the bed of the river, the water being, in several parts, but a few inches in depth. Five hundred yards above Goorookelganga, the river is perfectly dry, and continues so as far as Kooranjemony, a distance of 10

miles, where it unites with the Virgel. To Kooranjemony the breadth of the river varies from 120 to 140 yards. The banks are in excellent condition, and the bed consists of deep sand which rises higher and higher as you approach Kooranjemony, until it becomes in some places level with the banks, and evidently continues to increase.

There is not a village, nor, except at Goorookelganga, even a house on the banks, from the mouth of the river to this place. At Goorookelganga two ferryhouses have been established, by which the commerce between the Interior and Trincomalie is carried on. When this branch of the river is navigable, the natives avail themselves of the opportunity of conveying their grain &c. to the neighbouring ports. At Kooranjemony, the Mahavilla turns off at a very acute angle, at the apex of which it pours its waters into Virgel. It is said that the Malabars, who possess a large Gentoo temple near the mouth of the Virgel, were assembled, many years ago, by their priests, in order to widen and deepen this branch for the purpose of obtaining a greater supply of water to irrigate the paddy plains belonging to the temple. This was easily accomplished, the current being naturally directed into this channel. Since then it has been considerably enlarged. Still the breadth of the Virgel is much less than that of the Mahavilla; and from this circumstance, the current runs with great impetuosity. The natives raft considerable quantities of timber up the larger or Mahavilla branch, when it will allow of a passage, which, as I observed before, is only in January and during the rains: and when they arrive at the conjunction of the two branches, so great is the impetuosity with which the stream rushes into the Virgel, that it becomes exceedingly difficult, and even dangerous in attempting to gain the other branch; for, should the rafts come within the influence of the current, they are hurried down

the Virgel to the sea, the people being obliged to abandon them, and swim to shore. In this way many rafts are lost annually, and, but a few years ago, five out of six unfortunate men lost their lives in endeavouring to pass the junction of the two streams. I myself narrowly escaped a similar fate in exploring the Virgel, my boat, by the violence of the current being nearly dashed to pieces against some large trees that were growing in the river.

I have already observed that the river at the junction turns off at an angle, and that the Virgel branches off from the apex—consequently, the current of the river is directed to the Virgel. Now, to turn the stream round this angle by damming up the Virgel, would be impossible, because the water at the entrance of the Virgel is, even when low, 10 feet deep, and the bed of the Mabavilla immediately below the junction, is 5 feet above the water. The river, during the rains, rises 10 or 12 feet, at which time the stream at the entrance of the Virgel is so strong and deep, as to render it impossible to throw a dam across it in order to force the water round the angle. But, about 700 yards above the junction, there is a channel 20 or 30 yards in width, which unites with the original bed again below. Were this channel enlarged, and the river immediately below its entrance dammed up, the stream would be forced through the channel towards Trincomalie. But the dam ought to be very firmly constructed, on account of the current during the freshes.

Another method of effecting this object would be, by turning the stream into the Dambanar, which branches off from the left side of the river, about 1,000 yards above Kooranjemony, and unites with it again 500 yards above Goorookelganga, from which place to the mouth, there is no fresh water. I examined this stream at its commencement and observed that its breadth, for 3

miles, varied from 40 to 70 yards; it then turns off at right angles and flows through a narrow rocky channel 12 yards broad and 60 long. The rocks consist only of sand-stone, and therefore may easily be removed. Still further up, the stream runs without interruption, until it branches off from the river above Kooranjemony, and thus cuts off both the angle at the junction and the dry bed of the river between Kooranjemony and Goorookelganga.

Sunday, March 5, 1832.—Proceeded up the river with our canoe, containing, besides myself, eight people; six rowers, a steersman, and a look-out-man. Having no outrigger, the greatest attention was required to steer clear of the drifts, as an upset might have been attended with dangerous consequences, the river swarming with alligators. We were six hours in pulling up to Pooleadepoote, a small place situated on the left bank of the river. Here I pitched my tent for the night, on a dry sand-bank in the middle of the river, which I preferred to the shore, on account of the incredible numbers of musquitoes, elephants and chetaha, were also numerous, the howlings of the latter being heard the whole night. The alligators, too, were splashing in every direction.

Monday, 6.—Pulled up in four hours to Oroone, 7 miles from Pooleadepoote. It is a village on the left side of the river, consisting of six or seven well-built houses, constructed of large tamarind, jack, and mango trees. But the place was deserted, in consequence of two men having died of fever. This is the usual practice of the natives in small villages. The houses were supported by piles in consequence of the inundations of the river at its rise during the December rains.

The vidahn of Tricnamode, which is on the right side of the river, paid me a visit at this place, attended by about fifty well-dressed Moormen. He has

under his jurisdiction several large villages on the right side of the river; the inhabitants of which cultivate paddy very extensively. Cattoo-amvella is a village about a mile from the opposite bank of the river. It contains thirty families and a Moorish temple.

Monday, p. m.—Proceeded up to Catoopelane, two miles from Oroone, and on the same side of the river. This village contains thirty families. It is under the jurisdiction of the vidahn of Davarella, a place in the interior, about eight miles from Catoopelane. The houses here also are built upon piles. Here, I was surrounded by at least 100 Moormen, who were assembled to celebrate their Christmas at their temple at Cattoo-amvella. All the villages in this part are populous; and the surrounding country abounds in grains.

Tuesday, March 7.—Was six hours in pulling up to Perreatory, a large village on the right of the river, ten miles from Catoopelane. Here it was that Capt. Anderson crossed the river with a party of troops on his march from Batticaloa to attack Bintenne, on February 14, 1815. It contains fifty Moorish families, who are neither under the jurisdiction of the Vedahs nor the Cingalese. Near this place two Modliars reside; the Peereatory Modliar who presides over eight villages and the Chinnetorry Modliar who superintends but three.

From Kooranjemony as far as 3 miles below Peereatory, a distance of 27 miles, the river varies in breadth from 90 to 140 yards, and from 4 to 7 feet in depth. It is very winding and was then very low. At Kooranjemony, it rises during the freshes from 10 to 12 feet; here it rises from 12 to 15 feet. In some places it overflows its banks 3 or 4 feet; but this inundation is of short duration, and takes place but twice in the year—January and August. At the sudden turns of the river, sand

is collected in banks 3 or 4 feet above low water, but covered at the rise. These banks must be removed in order to admit the passage of boats. Most probably, were the impediments at Kooranjemony removed, the force of the stream would gradually destroy these banks. Besides this impediment, there is another which renders the navigation exceedingly difficult and dangerous—I mean dead trees, which have hung for many years in the river attached by their roots to the banks. But these may easily be removed by the natives of the neighbouring villages. Most likely this is one cause which prevents the sand from drifting down. The stream runs generally 2 miles an hour: but in the narrow parts of the river it is of course more rapid. Three miles below Peereatory, the features of the river are considerably altered. Here it suddenly becomes broad and shallow, and separates into two branches—the right, which I ascended is called the Peerearganga; the left, the Chenaganga. I crossed the latter in two places: its breadth at the one was 110 yards; at the other 90. It unites with the Adambanar, and its bed is dry and consists of deep sand. It would be possible to turn the river into this channel, as, at its separation, it is very shallow. This is worthy of consideration. A little below Peereatory, the natives had thrown a dam obliquely across the river in order to turn the stream into a large canal.

Wednesday, March 8.—I proceeded through a fine open country to a hill about 8 miles to the right of this place. It is mentioned by Capt. Anderson as having its top constantly veiled by the clouds. It is called Demballagalle by the natives, and the Gunner's Quoin by mariners. I should suppose it to be between 3 and 4,000 feet in height. The people of Peereatory declare that for ages no one has succeeded in gaining the summit; and that the Vedahs were the only persons who had made a partial ascent in search of honey: The day previous, I had despatched to the hill the

Vidahn of the Vedahs, (many of whom live at the foot of the hill,) in order to procure guides for my intended ascent. But when I arrived, he informed me, that they were terrified at the idea of ascending and had fled. My followers declared that without them it was impossible to accomplish my object. But when I told them that I would make the attempt alone, they consented to accompany me. There is no path known to the natives; but, on approaching the top, we perceived an elephant path, and from the quantity of dung, I should suppose these animals to be numerous here: but how they succeed in making their way up, I cannot imagine. There certainly must be a path known only to them and to the Vedahs. We were three hours in gaining the summit. The ascent was very difficult: I was frequently obliged to creep up on my hands and knees, and had often to turn back in order to find a more accessible way. However, I was rewarded for all my toils by a most splendid and extensive view of the country. I could distinctly see Chapel-point at Trincomalie, behind which was Flag-staff-point, Batticaloa lake; the hills beyond Minery, and the Kandyan hills were also visible, the contrast between Tambankadewa, and the Vedah districts, as seen from hence, is very great: the one consisting of uncultivated plains, and abounding with marshes, the other having the appearance of an extensive park. There is no hill within 15 miles of Gunner's Quoin.

After taking bearings, I resolved to attempt the elephant path, but soon lost it, and had even greater difficulty in descending than in ascending. For we were frequently obliged to cling with our hands to the branches of trees and suffer ourselves to drop a height of 6 or 8 feet over loose overhanging stones whose balance very little weight would destroy. The Vedahs cultivate Indian corn, and other dry grain, and possess several small gardens.

I was informed that about 16 miles to the east of

the hill, there is a hot spring which rises three or four feet above ground, and is surrounded by a cauldron 25 yards in diameter, consisting of very soft mud, from which issue both a warm and a cold stream.

Thursday, 9.—I proceeded this morning to the junction of the Ambanganga with this river, about five miles from Peereatory, and rested till afternoon, on the point formed by the two rivers. A mile above the junction and on the left side of the Ambanganga is the village of Dastotte.

In the afternoon I proceeded to Marrigototte, a village about five miles from the junction, situated on the left side of the Mahavilla, and containing ten Moorish families.

The country people began to make many objections to my proceeding further, particularly the Vidahn of Dastotte, a man of great influence in this part. He even threatened my guide who had accompanied me from Catoopelane, if he did not return. But when he found that I was fully determined to proceed, he altered his behaviour and became attentive. The Peereatory Modliar appeared to have very little influence here, so that his presence was of very little service. I could obtain no information respecting the river beyond Calinga.

Friday, March, 10.—Proceeded to Calinga, six miles from Marrigatotte, and 24 from Peereatory. From the latter place to Calinga, the river varies in breadth from 250 to 500 yards, and in some places is not more than one foot deep. The banks are in good order, but are overflowed during the freshes, which I attribute to the Virgel not being a sufficient outlet.

The Headmen of Cottovilla, five miles from Calinga, waited on me here, and represented that my canoe could not go any further, in consequence of the rocks; nor would they furnish me with men to carry it. In

fact, they made all the opposition in their power to my further progress; and, notwithstanding they had received specific orders to render me assistance, they refused, on the ground of their being under the jurisdiction of Matella, which I afterwards learned was untrue.

Cottovilla contains a population equal to that of the Tambankadewa district, and pays, I understand, no duties to Government, on account of its being a temple village.

The plains on each side of the Ambanganga are very extensive, and are irrigated by means of large water-courses, which are supplied by the superabundant water of the river which overflows its banks. -

On my return from my excursion, I observed marks of the country having been formerly cultivated; and from the large population of Cottovilla, there is no doubt but that this part of the country must have been formerly in a very flourishing condition.

At Calinga, the river, for about a mile, is exceedingly rocky; reefs of rocks in some places running from bank to bank, forming water-falls over which the stream runs with great impetuosity. Some of these falls are 12 feet in height. I was informed that the river continues thus for many miles, which completely dispirited my crew. With these difficulties and the great opposition of the headmen, I began to hesitate about proceeding; but the anxiety I felt to solve the question as to the practicability of rendering the river navigable, induced me to persevere. I accordingly ordered the canoe to be hauled up on shore, and gave the headmen to understand, that I would remain till I received directions from Kandy. I therefore sent letters to Sir John Wilson, Commander of the Forces, and to the authorities in Kandy, explaining my situation. Soon after these letters had been despatched, the headmen became alarmed, and offered to give me every assistance; at the same time declaring that it was

useless to attempt to proceed further, for that the river was very rocky and dangerous; but such was their either real or assumed ignorance respecting the river, that they had actually never heard of such a place as Himberewe which I knew could not be far distant.

On examining the river immediately above Calinga, I found it rocky, but still it did not appear to me impossible for a canoe to proceed, and I therefore resolved to make the attempt. After having had the canoe carried a mile along the banks, I made preparations to re-embark; and, lest I should encounter a similar interruption, I proposed that forty men should accompany me along the banks; but so little authority had the headmen, that it was not until after a long and very noisy debate, that it was at length agreed that the Moors should act as pioneers to clear a road through the jungle; the Vedahs carry the baggage; and the Cingalese be ready to carry the canoe past any unnavigable part. Thus we advanced, in all about 200 people, and though there were forty and fifty people to carry the baggage, part of it was frequently left behind; a bundle however small being considered a sufficient burden for one man.

Sunday, 17.—Pulled six miles up the river, and found it rocky in some places; reefs running across, causing falls of about 2 feet. Pitched my tent on a sand-bank.

Monday, 18.—Succeeded with difficulty in pulling through the rocky part of the river. The rocks extend 14 miles, and are generally from one to three feet above the water when low, but are covered at the rise and have a deep channel running between them. The breadth of the river varies from 150 to 250 yards. The banks are high, but there are numerous gaps cut through them in order to allow the water a passage into the numerous rivulets and canals which extend a considerable distance into the interior.

Cinnamon grows here, and I was informed by the headmen that ten persons had been sent three months ago to cut it for Government. I observed a tree which I understand grows in abundance here, and which produces the finest description of white dammer.

In the afternoon, I proceeded up two miles and came to the bed of a large river, down which a small stream was running, and entered the Mahavilla from the right side. Its bed consisted of sand, and was from 50 to 60 yards wide. I could not ascertain its name though it was the largest I had passed. It probably rises in the S. W. of Batticaloa.

Tuesday, 19.—Proceeded this morning to Himberewe, a village on the right of the river, containing about 30 families. The inhabitants, apparently Vedahs, possess gardens on both sides of the river, which produce Indian corn, tobacco, curracan, pumpkins, plantains, &c. I observed bows and arrows in several of the houses which I visited. The country is the finest I have seen in the Island, and well calculated for grazing, as the grass is extremely fresh and cattle numerous. It struck me that if wheat would grow anywhere in Ceylon, this is the part best calculated for it. The temperature of this country is much cooler than at Bintenne, the latter being surrounded by hills.

At 12 left Himberewe, and at 5 passed Gindurawe, a small village on the right. Here there is a larger plantain garden. I pitched my tent for the night on the right bank about 6 miles from Himberewe.

Wednesday, 20.—This morning I reached Kindegoddy, 9 miles from Himberewe, a large Moorish village on the left. The land is watered by small streams from the hills: it is flat, but not very extensive, and produces dry grain and paddy; for the cultivation of the latter of which it is peculiarly well calculated. The village is 18 miles from the ter-

mination of the rocks above Calinga: The river, during this distance, varies from 180 to 250 yards in breadth, sometimes extending into reaches or bays. The water here becomes shallow, and we were obliged sometimes to drag the canoe a short distance over the bed; the trees overhang the river so low as sometimes to prevent the passage of the canoe through the deep parts. The banks are good and high, and are not overflowed. The rise of the water during the freshes is from 20 to 25 feet. There is a road from Kidegoddy to Kandy, the distance of which place I conceive to be the same as from Bintenne to Kandy.

At 1 p.m., I left Kidegoddy and at 5, arrived at Bintenne, $5\frac{1}{2}$ miles distant. The river varies in breadth from 100 to 200 yards, and for the first mile is very rocky, having the same appearance as at Calinga.

Bintenne is too well known to require a description. It suffers much from want of rain, and is considered by natives as excessively hot. It was used, I understand, by the Kandyan Government, as a place of banishment. The river rises 25 feet during the freshes and was never known to be so low as at this time. The country around contains a large population, probably seven or eight thousand people.

There is an excellent road between Bintenne and Batticaloa, through the Vedah district, a four days' journey:—

	Miles.
From Bintenne to Paddecombero Waddegam, where five Vedah families reside.....	18
From Bintenne to Hordapallata Allegoddy, containing six families.....	36
From Bintenne to Kittella Badegama, containing three families	50
From Bintenne to Erroor	84
From do to Batticaloa.....	93

At Bintenne provisions are extravagantly dear; they are brought from Batticaloa and Hambantotte. Rice in particular is very dear.

Thursday, 21.—Was unwell, and remained at Bintenne, the excessive heat having caused a determination of blood to the head.

Friday, 22.—Left Bintenne and arrived in three hours at Pangragam, a large Moorish village, pleasantly situated on the right side of the river. There is no variation in the appearance of the river from Bintenne to this place. The inhabitants are subject to a Moorish Vidahn, who paid me great attention and rendered me more assistance than any I had hitherto met with. But I could obtain no information on which I could depend, respecting the river, beyond this. Some said that after proceeding 6 miles further, I could easily reach Kandy by water. This induced me to persevere, particularly as I was informed that there was a canal which cut off the rocky part of the river above.

At 2 P.M. left Pangragam and found the river very rocky, and in some places water-falls of 3 or 4 feet high. After proceeding with difficulty for three miles, I pitched my tent for the night.

Saturday, 23.—Found as we proceeded, that the river became still more rocky; and in getting the canoe over a cataract 6 feet high, it filled three times. After this, we proceeded a short distance to Alligam, where we found it impossible to proceed further in the canoe, on account of the rocks. Here I found the canal that had been mentioned to me at Pangragam. Its bed is 80 or 90 feet above that of the river. It was cut, it is said, by the order^s of some Kandyan king. It commences at a small^l cataract eight miles above Pangragam, runs by the side of a long hill and after skirting extensiveaddy plains, falls into the river opposite to Pan-

gramam. I ascended it for three miles from its mouth, and found it from 6 to 9 feet wide and 1 foot deep, having a slow current. The Vidahn of Pangragam told me that it was now but of little use in consequence of having been long neglected.

Even here I could obtain no information respecting the river, but found it less rocky about the mouth of the canal whither I had my canoe conveyed and where I spent the night. But half a mile beyond, it was very rocky; still the people assured me that still further on I should find the river perfectly free from rocks, and that I should be able to proceed in my canoe.

Sunday, 24.—Walked up to Rattambe along the banks of the river, a distance of four miles. Here the Oma Oya unites with this river and both fall into a natural basin formed in some perpendicular rocks which rise 40 feet above the surface of the water. Besides the principal fall which is 16 feet in perpendicular height, there are several smaller falls of 10 or 12 feet in height. The rocks forming the basin are, during the freshes, 4 or 5 feet under water, so the rise here is about 51 feet. Half a mile above Rattambe, I crossed a large river called the Bombee Oya, which enters the Mahavilla on the left side. About a mile from the river there is a village of the same name where I spent the night.

Monday, 25.—The Vidahn of Pangragam, who had accompanied me hither, left me. I have obtained considerable information from him respecting the country and the river. He served as an interpreter to my Cingalese followers. Sent my horse and baggage on by a road which led to Kandy resolving to follow the course of the river on foot. After scrambling a considerable distance along the bed, over rocks and sands my further course was interrupted by a range of lofty and inaccessible rocks, extending across

the river. I was therefore obliged to make a circuit, and following my horse and baggage which I presently overtook, we ascended a hill, near the summit of which the path became very narrow, and led along the verge of a precipice 150 feet in height. Not suspecting danger, we still continued our course, till the path, which consisted of soft soil, approached so near the edge of the precipice, that the ground under the horse's feet, gave way, and threw him on his knees. We endeavoured to extricate him, but he plunged, and fell over the precipice upon the rocks beneath, and was so much injured, that we were obliged to shoot him.

Tuesday, 26.—Crossed the ferry of Gimblegamtotte, and as the coolies refused to go further, I was obliged to leave my baggage and proceed to Gonnegame, and from thence to Kandy, where I arrived after a fatiguing walk of 25 miles. There appeared to be no improvement in the river during this distance, and the rocks and cataracts still continuing except for two or three miles. Had I obtained information on which I could depend as to the state of the river I would not have proceeded beyond Bintenne.

It will be perceived from the above journal, that the river in its present state is navigable for boats only of the smallest size. But that were the obstructions at Kooranjemoný and Goorookel removed, impediments in other parts of the river, consisting principally of sand would also be removed by the mere increase of the current and thus render the river capable of being navigated by the largest boats, at least as far as Calinga, 80 miles from the mouth, where it becomes rocky: and even then these rocky parts might be avoided by opening a stream which branches off from the left side of the river immediately above Calinga and enters it again about a mile and a half below. But even the rocky parts of the river may be rendered navigable: for the rocks were not more than three feet above water even at

the time I visited them, and the water was never known to be so low. They are also of so soft a nature as to be easily broken by a sledge-hammer or else blasted. Should this ever be undertaken, it would be necessary to clear only one side (the left is the most eligible) of the river for the breadth of 40 yards. A tracking path should also be cleared on the bank. The expense and difficulties are not so great as may be imagined. But in order to form a correct idea as to the practicability of rendering the river navigable, an intelligent person should reside at some convenient spot, Cottovilla for instance, where he would be enabled to examine the river at the various periods.

No. VI.—(*See pages 84 and 85.*)

**KALKUDA BAY—THE FUTURE PORT
FOR BATTICALOA:**

REPORT OF CAPT. DONNAN.

The following is the full report we recently referred to, which has been courteously placed at our disposal by Government:—

Master Attendant's Office, Colombo, 6th Feb. 1872.
The Hon'ble the Colonial Secretary, &c., &c.

Sir,—With reference to your letter No. 67 of the 30th November last, and previous correspondence on the subject, I have the honour to report my return to Colombo from visiting Vendaloos Bay.

I proceeded in the steamer "Serendib" on the 3rd ultimo and landed at Batticaloa on the 7th. On the 10th I proceeded by land in company with Mr. Folkard to Valacheena rest-house, which is about four miles from the proposed harbour in South Bay or Kalkodar. On the 11th and 12th we visited Kalkodar, and on the latter date we were rowed in the Masullah boat, which Mr. Morris very kindly despatched from Batticaloa, from Kalkodar across Vendaloos Bay and up Valacheena river, thus having an opportunity

of judging of the merits of both Kalkodar and Valacheena river as a port of resort for vessels in the N.-E. monsoon.

I have no hesitation in stating that should it be found necessary to establish a port as an outlet, for the Batticaloa district in the N.-E. monsoon, Kalkodar is superior to Valacheena river. The former requires little or no expense to make it at once available; it possesses a deep bay (much deeper than is shown upon the Admiralty chart of the East coast) formed by Vendaloos Point extending due east from the head of the bay for about one mile, and sailing vessels would have no difficulty in coming into the anchorage or in putting to sea; whereas the entrance to the latter place is bounded by an extensive and dangerous reef on which the sea breaks, and the wind blows right in so that even if the river were deepened sufficiently to admit moderately large vessels, sailing vessels would not be able to get out to sea without being towed or warped, which would be a very tedious operation for the long distance it would require to be done to get a sufficient offing.

In Kalkodar I found four fathoms water and sandy bottom within 400 yards of the beach at the head of the bay, where I believe vessels of 16 feet draught would find safe anchorage throughout the North-East monsoon. Vendaloos Point extending to the eastward shelters the bay from the monsoon wind and to a great extent from the sea also; for although there was a heavy sea outside of the point, and in Vendaloos Bay on the day I crossed it, yet at the four fathoms anchorage within Kalkodar Bay there was no sea, but only a smooth surface swell from the eastward, certainly not higher than is to be found in Colombo inner harbour on a very moderate S.-W. monsoon day. Vessels could ride at anchor there very snug and steady, with a small anchor and cable laid out astern to keep their head on to the swell.

There is a flat ledge of rocks shelving abruptly into deep water skirting the northern shore of the bay, and at the termination of it in the angle of the bay, I found very little surf on the beach. At this point a jetty might be constructed, at which boats could lie and receive or discharge cargo, and the erection of a jetty along with a small harbour light on the Vendaloos Point appears to be the only outlay required to make Kalkodar Bay available for shipping purposes. The Batticaloa road, would, of course, require to be extended up to the head of the bay.

In thus reporting Kalkodar Bay an available harbour for shipping, I am presuming that it and the approaches to it are free from hidden rocks or shoals, and this point I had not the means of determining; therefore, before it can be pronounced a safe port, a very careful and minute survey of the bay and its approaches is requisite. Mr. Folkard is aware of a reef having only from 9 to 12 feet of water over it situated in the entrance to the bay, but he says there is a deep and wide channel on both sides of it, and about three-quarters of a mile off Vendaloos Point, and there is a patch of rocks, which lies in the way of vessels coming from the northwards, but they might easily avoid it by taking careful cross-bearings of the neighbouring headlands. I have no doubt, however, that if an accurate chart were made, and the more prominent rocks marked off by beacons, an easy and safe channel for both sailing vessels and steamers would be found leading up to the four fathoms anchorage in the head of the bay.

In connection with this subject, I may report upon the performance of the masullah boat on the day I landed at Batticaloa. There was on that day a heavy swell in the roadstead where the "Serendib" anchored about one mile off the bar, yet there was very little surf on the beach where the masullah boat landed about midway between the bar and the flagstaff,

and I was landed on the beach perfectly dry without having received a single spray over me. There was too little water over the bar for the boat to pass into the lake and therefore it was obliged to be beached outside.

During the day the boat made three or four successful trips to the steamer, and from what I witnessed of its performance, I believe it is capable of communicating with a vessel in the offing on any day of the N.-E. monsoon, even when it might be unsafe for a vessel to anchor. The masullah boat has, therefore, proved quite a success, and it is a great acquisition to the port of Batticaloa. I doubt, however, the ability of the Batticaloa boatmen to work it after the agreement with the Madras crew shall have expired.—I am, &c.,

(Signed) JAMES DONNAN.

THE MARAVARS OF RAMNAD.

Mr. Norton stated in the course of his address in the Ramnad partition suit, which is being heard at Madura, that the Maravars of that District were a set of robbers, cut-throats and murderers; that a chief in the same clan was simply chosen to protect the pilgrims to Ramesweram that annually resort to the sacred shrine in that place; and that the members of the clan were not warriors as stated by Mr. S. Subramanien, in his opening address. Mr. V. Bhashyam Aiyangar, in his reply, stated that every Maravar was a warrior and held lands on a military tenure; and that the scale upon which lands were granted by the Setupatis of Ramnad to their dependents was a piece of land capable of yielding per annum five kalams of rice to an ordinary foot soldier carrying a sword and spear; land yielding seven kalams to a musketeer; land yielding nine to a *saraboji* bearer; and land yielding fifty to a Captain of a hundred

men. Out of the produce of these lands a tribute of five fanams was payable to the chief for each kalam of produce raised. Many other interesting particulars have cropped up during the hearing of the above suit. In the *Gazetteer* of Southern India, published by Pharoah & Co. in 1885, we read:—

“It is supposed by many that the Marawers (*i. e.* the people of Ramnad and Sivagunga) are the aborigines of this part of the Carnatic. Even to this day their features are different from those of their neighbours, and are such as to give some probable ground for the conjecture that the legend above narrated of the co-operation of the monkey tribe and their king Hanuman in the conquest of Ceylon, originated in aid really afforded in that enterprise to the Brahminical invaders, by this people. The Marawers do not use turbans, but a handkerchief around the head; the men wear ear-rings and have a fancy for pulling their ears downwards till they become of an unusual size. The women insert massive (not always valuable) ornaments in the lobes of the ear till a perforation is made an inch wide, and the ear sometimes comes down to the neck. The Marawers profess to worship Siva, but in the course of centuries, their religious ceremonies have been much influenced by the Brahmins. With regard to their wedding ceremonies and re-marriage of widows, there is a wide departure from the universal Hindoo custom.”—*Madras Mail*, Oct. 2.

THE SETUPATIS OF RAMNAD.

In the course of the hearing of the Ramnad partition suit at Madura it came out that the Setupatis obtained the titles of “Warden of Tondi Harbour”; “Establisher of the Pandiya Throne”; “Establisher of the Chola Country”; “He who conquers countries seen, and never lets go countries conquered;”

"He who propped up the kingdom;" "Para Rajah Kesari, or lion among foreign Rajahs;" "Rajaya Rajah, Rajah Parameswara Rajah Martanda and Rajah Gambhira;" "The Master of the Rameswaram;" "Triumala Setupati, and also that of Protector of the Queen's tal;" and so on from the Pandiyan and Naik rulers, for the various meritorious military services rendered by the Setupatis in the war against Madura by the neighbouring kings. The Setupatis were also granted the privilege of raising the monkey banner and the *garuda* banner; also the privilege of using the lion faced palinquin, peculiar to the Royal house of Madura, having relieved him for ever from the duty of paying tribute; also to celebrate the *Navaratri*, or nine nights festival in his own capital, with the same pomp and magnificence with which it was celebrated at Madura, and other privileges. The Setupatis also fought several wars, entered into alliances, conventions and Treaties with other Rajahs and Kings acquired territories by such deeds, and at one time they even went so far as to invade Ceylon, and subjugated the neighbouring Pandiyan Kingdom and ruled over it for a considerable period of time. They were the chief of the seventy-two Poligars on this side of the peninsula, and had coins of their own, and fortresses and rights of pearl-fishery on the coasts bordering their country. The Rajah Pondiman of Pudukota, the Rajah of Sivaganga, and the eighteen chiefs of the Tanjore country must stand before the Setupatis with the palm of their hands joined together and stretched out towards the presence. The chiefs of Tinnevely, such as Kata Boma Nayakkan of Panjala Kurichi (the famous Omiyan), Sirumala Nayakkan of Kadalkudi, and the Tokkala Totteyans, being all of inferior caste, must prostrate themselves full length before the Setupati; and after rising must stand and not be seated.—*Madras Mail*, Oct. 9.

THE PROGRESS OF TRADE AND AGRICULTURE AT BATTICALOA.

ENCOURAGEMENT TO OPEN A BRANCH OFFICE OF THE NEW O. B. C.

[The following is the Statement furnished to us by Mr. Robert D. Somanader some months ago, as supporting the case for a Branch Bank at Batticaloa. We think the Directors of the New Oriental Bank might well take the subject into their careful consideration.]

IMPORTS.

Table No. I.—Showing the average for periods of five years of the Import of Rice into and Export of Paddy from Batticaloa for 30 years taken from the Returns of Customs:—

Imported Rice.		Exported Paddy.	
Period.	Average Bushels.	Period.	Average Bushels.
1856-60	8,648	1856-60	5,512
1861-65	11,660	1861-65	48,872
1866-70	17,555	1866-70	61,692
1871-75	40,394	1871-75	80,697
1876-80	89,286	1876-80	87,555
1881-85	*87,896	1881-85	160,713
In 1888...131,238½		In 1888...†25,981	
Rice imported in 1889 is 112,830 bushels.			

* The slight decrease in the average Import of Rice for the period of 5 years of 1881-85 was due to the good harvests, in some of those years in this District. In 1883 the amount of paddy exported from Batticaloa was 306,502 bushels.

† The great decrease in the export of paddy in 1888 was owing to the great failure of crops of that year, hence the great increase in the import of rice during the same year.

The above figures show a decided increase of trade in these two articles of commerce.

1, The principal exports of this place are paddy to Jaffna, and timber and copra chiefly to India and Colombo.

2. The principal imports are rice from India, and Manchester goods through India and Colombo as well as articles of general merchandize from India, Colombo and other ports of Ceylon.

EXPORTS.

Table No. II:—Showing the export from Batticaloa of timber and copra to India, taken from the Customs' Returns:—

In the year	Timber.			Copra.	
	Quantity. Logs.	Value in Rupees.		Quantity. Cwt.	Value in Rupees.
1876	3,155	22,306	...	3,003	23,351
1883	*3,047	46,669	...	3,685	29,230
1886	4,007	51,995	...	5,661	43,502
1888	4,915	57,026	...	14,588	101,097
1889	—	63,427	...	9,927	69,478
	* Logs differ in dimensions and value.	Shows a steady increase.			Shows a steady increase.

IMPORT DUTIES.

Table No. III.—Showing the amount of duty received on Imports at Batticaloa, for some years past. From the Customs Returns:—

In the year	Duty received on Imports.		
	R.	o.	
1876	...	12,654 57	This shows a steady increase in the Imports, except in 1886 and 1887 which is counter-balanced in 1888:
1877	...	19,823 11	
1878	...	27,155 66	
1883	...	32,490 97	
1887	...	85,092 51	
1888	...	36,986 89	
1889	...	30,015 71	
1888	...	30,484 67	
1888	...	45,090 49	

Customs Revenue for 1889...Rs. 43,360.

THE PRESENT STATE OF TRADE IN BATTICALOA.

Table No. IV.—Showing the value of the Exports and Imports of Batticaloa for the year 1888; from the Customs Returns :—

The Trade in 1888.	Value of Exports.		Value of Imports.		Total value of Exports and Imports.	
	R.	c.	R.	c.	R.	c.
Coastwise ...	511,157	25	No returns*			
To India ...	174,185	00				
From India ...	...	...	531,780	80		
Total value...	...	...	...	...	1,217,073	05

Value of Coastwise Trade for 1889 is R858,067.

The total value of the trade for last year as per Table No. IV. is about R1,200,000 in round numbers. This is rather low, considering the small export of paddy last year owing to bad harvest. The total value of coast-wise exports for 1886 has been R893,796 50c. as against R511,157 25c. for 1888.

This table does not include the value of the coast-wise Imports which is considerable. There is also a good wheel traffic between this and the Uva Province.

Taking all these into account, the annual value of the Trade of this place may be safely estimated at one and a half million rupees (R1,500,000.)

THE PRESENT STATE OF AGRICULTURE IN BATTICALOA.

Table No. V.—Showing the number of acres under cultivation of various products. From the Ceylon Blue Book :

Products.	Paddy.	Other Grain.	Coco- nuts.	To- bacco.	Pasture
No. of acres nuder cultivation. }	54,948	3,116	13,260	413	219,015

* No returns are available at the Customs here of the value of articles Imported from Colombo and other ports of Ceylon. We have an import of considerable value yearly from Colombo of various English and other goods, to form an idea of which if necessary, reference should be made to the Colombo Customs Returns.

RICE IMPORTS, EXPORTS, AND CULTIVATION IN THE EASTERN PROVINCE.

(From a Correspondent.)

The figures for importation of rice as given in the preceding pages are really for the *whole* Province, and another inaccuracy was that they omitted the importation of *paddy*, which is converted into rice in Batticaloa and sent on to the Badulla estates. Taking this at the usual rate the correct figures should be somewhat as follows:—

	<i>Import bushels</i>	<i>Export paddy</i>
1888	... 136 725	... 25,980
1889	... 130 907	.. 108,195
1890	.. 96,849	... 19,749

A recent article in the "*Independent*" is simply all bosh. Not one *single* acre has gone out of cultivation in consequence of the grain tax. Before the Grain Tax Ordinance came into force, a certain area of *old* land was abandoned gradually in favor of the new land lying higher up the streams, less liable to damage from floods and from the salt water. Never mind if the Agent's figures of cultivation are right or wrong: the fact remains that paddy cultivation is *extending* at Anuradhapura and Tissamaharama, and also *quietly*, I believe, in the Jaffna Wanni, as well as at Batticaloa.

Remember in Batticaloa only some *25 per cent* of the paddy area is protected by irrigation works; and when the N.-E. monsoon fails, as it did largely in 1887-8, the cultivation is seriously affected, and there is distress amongst the poorer classes who depend entirely on it. There happened to be no large public works in hand in 1888, and so special works had to be found to give employment. A

good deal of the outlay, too, was for seed paddy, which has been repaid. (The Grain Tax Committee recommend liberal advances of seed paddy to save the cultivators from the usurers.)

The sales for non-payment of the grain tax are simply purchases by the Crown to close accounts. They are largely redeemed when better times come round and are mostly of the "unfertile class of lands"; and besides there has been a great deal of combination in Batticaloa to try and defeat the working of the grain tax, which accounts for a large proportion of nominal sales.

Though 1888 was somewhat a bad year, and Government, *as a matter of grace*, remitted a large amount of annual commutation, yet 26,000 bushels of paddy were exported from the district—not in payment of interest to outsiders but for solid rupees paid down.

That was a frightful muddle the local "Times" made about the import of rice and local growth. 1890 has been the worst year for paddy the district has ever had, and the export of paddy, I hear, was only 19,000 bushels; but the import of rice was only 84,000 bushels, against 157,156 in 1889 and 198,484 bushels in 1888. These figures show that the local demand has no practical influence on the import of rice, but rather the demand in Madulsima and Badulla. Possibly the murrain on the road influenced cart hire and diverted the trade. I hear too large quantities of rice are being now sent via Haputale to Badulla. Early in the year when prices in India first rose, some of the chetties bought up a lot of locally grown rice and employed women to pound it out to be mixed with coast rice.

The Madulsima planters, too, were dissatisfied with the chetties, and tried, I learn, to organize a

European agency for the supply of rice. Negotiations on this side failed, but I do not know what other arrangements were made ; and evidently a good deal of rice has reached the district through other channels.

The present extraordinary weather and rain have done wonders for the district, and we are going, in the East, to have a splendid year, barring accidents, such as rain in harvest time. This is the *beauty of paddy*. The rain fails and crops are destroyed—but in 6 to 9 months you have another chance, and the chances are of a good season and plentiful crops.

APPENDIX

IN REFERENCE TO

ANURADHAPURA

AND THE

NORTH-CENTRAL PROVINCE.

ARCHÆOLOGICAL SURVEY OF ANURADHAPURA.

EXTRACTS FROM SECOND REPORT, BY H. C. P. BELL,
ESQ., C.C.S., ARCHÆOLOGICAL COMMISSIONER,
SEPTEMBER, 1890.

We quote the portions of Mr. Bell's second Report which are of most general interest:—

Within a quarter of a mile of the Abhayagiri the sites of sacred buildings (the majority now only recognisable by their stone boundaries and pillar stumps) are clustered thick. Those bordering the roads have been, as might be expected, ruthlessly indented on for modern requirements. It may yet be possible, by a prompt survey, to ascertain with some degree of certainty the extent and position of many of these ruins, the habitation of one of the three chief Buddhist establishments at Anuradhapura. But unless steps are taken without delay it will be hopeless to assay the task. A good deal—most indeed—of the land near the Abhayagiri is now in private hands, and the owners have not been restrained by scruples of superposition or art from breaking up and carting away wholesale boundary stones, pillars, steps, &c.—all, in short, that be could turned to profitable use. Under the circumstances, the wonder rather is that sufficient remains to allow of the *disjecta membra* being reduced to any order.

It is with the greatest satisfaction, therefore, that I am able to report two interesting discoveries in the

(c) About fifty yards north-west of the *pokuna*, and abutting on the Outer Circular, were found an octagonal shaft and *puhul* capital (a type not hitherto noticed at Anuradhapura) and some narrow moulded slabs deeply morticed. These gave hope of further discovery. When the raised site, six or eight feet above ground level, and some 140 ft. in length by 110 ft. broad, had been cleared of scrub, search was rewarded by a valuable archæological "find"—a post with three rails attached, in two pieces—a genuine fragment of a structural "Buddhist railing." Fortunately the peculiar shape of the semi-convex rails had them saved from the fate of the shapely pillars of which but stumps remain in position. The tenons at both ends of the standard explained at once the purpose of the morticed slabs. Here were the rail, post, and plinth; only the coping seemed wanting. After continued search a portion of this was found, showing a few inches above ground, and close to it two slabs of a rounded basement, 10 inch in depth, as originally built at right angles to each other. This fixed the south-east corner and determined the plan of the railing which followed the lines of the oblong site. Trial excavation brought up more pieces of rails and coping, and two additional members—a stepped sub-plinth and a low socle below the quarter-round base. There is therefore, every reason to hope that by running a trench along the foot of the mound more of this fine railing will be unearthed, and that it may yet be possible to restore it in part to nearly its pristine form.

The railing consisted of square 8 inches standards,—the angle posts probably 10 in. by 8 in.,—3 ft. 10 in. in height, kept upright by tenons (3 in. by 2 in.) at top and bottom, which fitted mortices in the upper plinth and coping. Three lenticular rails, $3\frac{1}{2}$ in. deep, project from the posts 9 in. to 12 in. The centre rail is separated $1\frac{1}{2}$ in. from the upper and lower rails, and these 2 in. from coping and plinth respectively. A tie $1\frac{1}{2}$ in. by $\frac{1}{2}$ in) strengthens the rails near

their lateral extremities. The widest interspaces of the mortice holes on the plinth slabs are but 17 in. which would bring the posts within a foot of one another; some would seem to have been still closer together. The coping, rounded at top is 8 in. deep, the upper plinth 13 in., and both are delicately moulded. The lower plinth, three-stepped ($2, 2\frac{1}{2}, 2\frac{1}{2}$) is 7 in. in depth, the basement 8 in., and the whole 9 in.—all cut on their upper surface with a half-inch set to prevent the members above sagging outwards. The entire railing rested on a stone foundation and from ground to coping was 7 ft. 6 in. in height.

Comparing it with the best known Indian examples, it follows that at Buddha Gaya in being rectangular, therein differing from the Bharhut, Sanchi, and Amaravati rails. In unsculptured bareness it resembles the railing round the Great Tope of Sanchi, but carries simplicity even further by square, in lieu of octagonal, posts.*

The annexed drawing gives the elevation and section of each member and a restored elevation of the whole railing—the first discovered in Ceylon.

Too few of the pillar stumps are traceable to permit of the plan of the building which the railing enclosed

* Mr. Burrows states (Report, Sessional Paper No. X. 1886, pp. 8, 12) that he came on a "Buddhist railing" when working at the *Nissanka Lata Mandapaya*, perhaps the most interesting building in Polonnaruwa. Unfortunately it has been wilfully and extensively broken, but most of the stone posts are still standing, while on the western side two posts are left with their rails still in position, which enable us to form an excellent idea of the whole arrangement." From the measurements annexed to his Report the rail is shown to differ considerably from that just found at Anuradhapura, being rather of "post and rail" type in stone. The posts are higher (5 ft. 5 in.), though of much the same width (8 in. by $8\frac{1}{2}$ in.). But the rails are both longer (3 ft. $2\frac{1}{2}$ in.), more shallow ($7\frac{1}{2}$ in.), and half an inch thicker (6 in.), and the interspace run from 6 in. to $10\frac{1}{2}$ in.

being so much as guessed. Speculation must await the result of excavation.

(d) Adjoining the Native Resthouse, are two unusually large balustrades, 8 ft. in length, with volute ends 1 ft. 6 in. in diameter, and a few broken pillars of a vihara which faces east, and must have had an importance. The outside stumps measure 1 ft. 5 in. square, those inside 1 ft. 3½ in. The terminals and steps seem to have been removed. Other stumps projecting from the ground at a slight distance from the four angles mark the site of the outlying chapels, of which that to the south-east is inside the Resthouse premises.

(e) A little south of the supposed Dhammaruchi monastery, across the main road, on a levelled mound, were found two carved capitals of the "pavilion" type, 1 ft. 9 in. by 1 ft. 3 in., and 9 in. at the necking to the shaft.

(f) A little behind must have been a building of some forty pillars, broken short, perhaps a second monastery.

(g) Close to the road, on a still higher level, are twelve one-foot pillars in the rough; and further east a single worked door jamb still upright.

(h) Beyond, near some cooly lines, is a fine "pavilion" (provisionally adopting the term *faut niwas*) of the type best known from the two near the Ruwanweli Dagaba and the Peacock "Palace." It faced west, measured 45 ft. 6 in. by 28 ft. 10 in., and followed the general arrangement of this class of building. The platform balustrades and guard-tones (decorated palas beneath seven-headed cobras) with bull & sets are half buried, but the steps have been "requisitioned" by some "Goth" loth to spare even the choicest architectural remains. These were 6 ft 6 in high and led between large and carefully carved *makara* rises to a landing slab, 10 ft. 3 in. in depth, side sedilia. The twenty-four pillars have shafts

5 ft. high, squared to 1 ft. 1 in., and topped by spaved capitals (2 ft. wide at top), with an ornamental band, 6 in. deep, of dwarf musicians and jesters. The pillars are ranged three and three, four deep, on either side of the central passage, 11 ft. wide. The exterior face of the outer capitals being left nearly perpendicular and bare of carving, would seem to imply that a brick wall shut in the pillars on all four sides. The interior space may have been divided into two rooms, 6 ft. by 8 ft., opening on to the central passage with a verandah, 6 ft. in width, round the building inside. The wall-plates of wood rested on square abaci and the roof may have risen thence in the picturesque Kandyan pagoda style. Eleven pillars are upright, but only four retain their capitals.

Including the two "pavilions" north-west of the Ruwanweli, the "Peacock Palace," and that in area Y near the Jetawanarama, not more than half a dozen of these artistic structures are known. They merit special attention and correlative study, pending which no confident assumption regarding their original conformation when completed, or their precise connection with undoubtedly sacred buildings, can be put forward with any claim to reliance.

(i) Across, and within a few yards of, the Kandy-Trincomalee road north of this "pavilion," in chena, now private property, stood a large vihara, 46 ft. by 42 ft., on twenty-four pillars (not one intact), also facing west. The basement and all but half the guard stones are beneath the ground. The steps and balustrades have gone the way of most of the stone in the neighbourhood. On the guard-stone faces are large conventional janitors overshadowed by nine headed cobras and on the off-sets bulls kneeling. Three of the connected chapels, those south-west, north-west, and north-east, can be traced. The main road has been run over the site of the fourth. They were each 24 ft. square and sixteen-pillared, with smaller terminals of janitors, under

five-headed cobras, lion off-sets, and balustrades and steps in proportion. A fifth building on twenty-four pillars lay behind the south-west annexe *en échelon*.

(i) Twenty yards north, amidst countless broken shafts, are a large and a small "stone canoe." The sides of the larger one are constructed of six monolith slabs—four stones nearly 17 ft. in length by 2 ft. 5 in. deep, and 7 in. thick, slightly concave inside, the end slabs 3 ft. broad—giving a total exterior measurement of 36 ft. 6 in. by 3 ft. Even this massive trough has not altogether escaped the modern sledge hammer, but is not past repair.

As with the giant "canoe" in the Outer Circular, a smaller "boat" lies near. This has been cut out vertically inside from a single block of granite, 9 ft. by 3 ft., to a depth of 1 ft. 3 in. and a length and breadth of 2 ft. 2 in. by 7 ft. 5 in.

(k) Stretching north of the "canoes" for a hundred yards or more must have been a wealth of minor vihares and connected buildings attached to Abhayagiri, with nothing now above ground to distinguish them from similar ruins already described. The remains of at least a dozen were counted, huddled together—five, a vihare and annexes, due east of the Dagaba; and others probably "disappeared" when the land was obliterated. All have suffered rough handling. It cannot but be a matter of regret that land so crowded with ruins was ever sold, or, when sold, that at least stringent conditions for the preservation of every stone *in situ* were not exacted from the purchasers and enforced.

* * * There can be little doubt that centuries back the Malwatu-oya, from some cause not now assignable, was liable to heavy floods, and that this causeway was designed to keep communication open at all times between the two vihares when the surrounding land was submerged. The causeway, 9 ft. wide, was built on three rows of wedged monolith piers (now only

3 ft. above ground), all tenoned for greater security, with cross beams and five or six longitudinal slabs, after the ancient fashion. The interspace between the uprights and lengthways was not more than 5 ft. It is remarkable that in the whole stretch of 308 yards hardly a beam or slab is left—a clean sweep, for which ashlar seekers of the present day cannot be held responsible, more especially in view of the distance of any existing road. The bi-section of the causeway occurs exactly at the middle of the river—a curious coincidence if nothing more. A few slabs and cross beams are to be seen in its bed, half covered by silt.

MIHINTALE.

Between September 13th and 17th I accompanied the Government Agent (Mr. R. W. Levers) to Mihintale, in order to familiarise myself with the ruins which stud the several hills and the ground at their base.

There is a good deal of archæological work still to be done at this place, so closely connected with the sacred history of Anuradhapura. The hills are honey-combed with countless cave-dwellings of recluse priests, and rock inscriptions abound. Many of these have a distinct palæographic value, exhibiting the gradual transition from the Asoka character to a less ancient type, and are now without historical record of royal donors by whom these saintly habitations were prepared and bestowed on the priesthood.

Dr. Müller has given only eight of these inscriptions in his work.

I propose, if possible, to devote a week or two later on to an examination of the caves and ruins at Mihintale, which have suffered the natural fate of comparative neglect from the proximity of the far more extensive and attractive ruins of Anuradhapura.

KANADARA.

We took the opportunity of visiting the old granite bridge over the Kanadara's recently discovered. It

lies six miles from Mihintale and four of the Trincomalee road.

By the courtesy of the Provincial Engineer (Mr. A. Murray), I am enabled to forward a detailed plan of this fine ancient stone viaduct, the most perfect example known.

It ran north and south, and consisted of fourteen spans, of which the only one broken adjoins the northern abutment. The road-way of the bridge varies from 8 ft. 6 in. to 10 ft. in width, across the three uprights, and was formed of seven horizontal slabs laid across the three centres and two end spans, and of six slabs elsewhere. The piers average about 12 in. by 9 in. in thickness, and at the deepest point are 5 ft. 6 in. out of the ground.

THE NORTH-CENTRAL PROVINCE OR THE DISTRICT OF NUWARAKALAWIYA IN 1832.

*(From Major Skinner's Life entitled "Fifty
Years in Ceylon.")*

In 1832 I was ordered to open a road from Aripo, on the western coast, where the pearl fisheries were situated, to Anarajapora, the capital of the district of Nuwara-kalawa, about which less appeared to be known than about the most recently discovered lake in Central Africa. In the latest maps of the island then published, this district was described as a mountainous unknown country, so that to ascertain its position I had to survey into it in the first place. This was a very slow operation, for this part of the country was so flat I could not triangulate it; moreover, it seemed to be the policy of the Kandians in those days to keep this sacred retreat as inaccessible as possible to Europeans; the low over-grown jungle paths, which alone led to it, were so extremely tortuous, that it was difficult at times to pass along them.

My astonishment, therefore, was the greater, when I reached the place, to find *extensive* ruins, large dagobas, magnificent tanks of colossal dimensions, and instead of the "mountainous country" represented in the, so-called, maps, I found a thickly-populated district, with evidence of its having been, at some remote date, the granary of the country. This all the more surprised me, for, when I received my orders to execute this work, I naturally tried to obtain some information regarding the country, but could gain none; no one that I could hear of had ever travelled through it, not even a Government Agent; and from the fact of its being so completely a *terra incognita*, I took an unusual interest in exploring it.

In addition to my military duties, the Governor conferred upon me the civil appointment of Government Agent, with revenue and Judicial powers, but without civil pay or remuneration.

Taking my field books and data to Aripo, I commenced my operations from the "Doric," a fine building, so called from its style of architecture. It was erected by Lord Guilford as a temporary residence for the Governor when he visited the pearl fisheries. I laid down the forty-seven miles of jungle path on paper. Of all the innumerable bearings and short distances, in most cases of a few yards only, there was probably not one really accurate; but so completely had these inaccuracies counterbalanced and neutralised each other, that in protracting the new line of road, which frequently crossed the tortuous old native jungle paths, I was surprised to find how correct the work was in the end. The country generally was very level, and most densely wooded; at one point I had to open a straight road of several miles.

I was in a desperate hurry, and after comparing our compasses and carefully allowing for their variation, I placed my assistant lieutenant, Mackaskill, of the 97th Regiment, at one end, while I took the other extremity of this straight line of dense, level

forest, and we worked towards each other. Each evening, on returning to our wigwam, we mutually communicated the distance we had respectively opened up. On a given day and hour we were supposed to meet, and I became very nervous as the appointed moment for our meeting passed by. We were both equally anxious, for we could ill afford to lose the time we had expended in this experiment. I ascended the highest tree in my neighbourhood and listened attentively for the sound of the axe of the approaching felling party. After some time, in despair I fired my gun, but no reply! The departure of half a degree by either of us from the true bearing would have separated us far from each other and I began to fear that this was the case. I sent an intelligent native out as a scout to reconnoitre, and in two or three hours he brought me the welcome tidings that he had discovered the other party. In a short time we found ourselves working abreast of each other, with about fifty yards of forest between us. This I consider was a great triumph for the Schmalcalder compass and perambulation, the only instruments we had used, the country being too flat to render the use of the vertical angle necessary.

The quantity of game of every kind I met with daily was almost beyond description, certainly not to be believed. Sir James Emerson Tennent, in his *History of Ceylon*, gives some account of it. I should be afraid to venture into details, my subsequent experience of the district having proved to me how possible it was to nearly exterminate it in a few years.

It was difficult to restrain one's enthusiasm in advocating the capabilities of this magnificent district. Sir Robert Wilmot Horton, who was then Governor, honoured me with his confidence, and encouraged me to be unreserved in my correspondence with him. It is strange, as well as satisfactory to me, to see how my dreams for the future prosperity of this Nuwara-kalawa District have at last been realised.

A few extracts from some of these letters, written in 1833, may be of some interest to those who know what the district is now :—

This country beats all my past experience of jungle ; the heaviest forest is quite child's play to work through compared with these "connaughts"—a "connaught" being land on which the forest has been cleared, and several crops of dry grain taken from it, until its fertility has been exhausted, when, to renovate it, the jungle is allowed to cover it ; this becomes thick and intensely thorny in proportion to the heat of the climate. In Nuwarakalawa it is a closely-matted thorny mass, which well-nigh defies the Nuwarakalawa woodsmen. Working in a narrow clearing, with high walls of this description of vegetation on either side, excluding every breath of air, and a bright, burning sun pouring down upon one, gives as lively an illustration of a tropical climate as any man need wish for. Even against such odds I find a restorative in bottles of simple decoction of tea, made icy cold by evaporation, by wrapping wet towels round the bottles. It is astonishing how soon a broiling sun can produce a cool, refreshing draught, without which the situation would simply be beyond endurance.

. . . The country, I am sorry to say, is rapidly becoming depopulated by disease and drought ; it is distressing to behold the fearful objects which constantly meet the eye. By opening up the country its further deterioration may be arrested ; and the Government will be redeemed from the reproach of receiving for its grain tax a commutation of 1d a bushel. Can a greater stigma attach to any Government than that it has districts so inaccessible that their produce is almost unsaleable ?

. . . Your Excellency may be pretty certain that if it could be ensured that your successors would adopt and carry out your philanthropic policy,

I should not hesitate to accept your offer to become the "Regenerator of Nuwarakalawa."

This district is full of antiquarian curiosities, and abounds with game of all sorts. Every night, pretty nearly, we sleep in the centre of a herd of elephants. I hear them constantly round my wigwam. The other day Mackaskill begged me to call him when I heard one. The same night a monster was amusing himself, dismantling a leaf-shed which had just been put up. I called my friend, but took the precaution to take a gun in my hand. Mackaskill turned out very sleepy, rubbing his eyes, with nothing on but a red flannel shirt. It was not very light, and the first intimation he received of the proximity of his new acquaintance was a trumpet and a charge! I covered his retreat, and had to decide whether to try and frighten the brute away, or by shooting him have to remove our quarters half a mile further up Anarajapora High Street!!! to get away from the nuisance which the carcass would have proved. My friend no longer doubted the presence of "allias." They are very inoffensive if left alone. When tracing, if the weather is dry and fine, I sometimes do not indulge in a new wigwam, but have my curry and rice cooked under a tree, and after a long day's work am glad to stretch my bed under the same shade. My servant came to me with a long face, a little while ago, complaining that an elephant had put his foot into one of the new plates he possessed. As the servant and his plates were in tolerably close proximity, the animal could not have been much bent on mischief to have allowed us all to get off so scot-free.

The two Vellachies—Peria, or large Vellachy, and Sinna, or small Vellachy—are very curious works. The country has numerous rock inscriptions, which I hope thoroughly to investigate at some future and more leisure time. The season for working inland

here is from the end of April to the middle of September. After the latter date our force should be bodily moved, either to the neighbourhood of the coast or up into the hills, to avoid the loss which would be consequent on the unhealthiness of the country, while it remains, as at present, a mass of overgrown vegetation. Even the "Chandrawankalang" or "Great North and South Street" of this city, in which I reside, is a forest, and is only defined by the wells which, centuries ago, supplied the houses with water. Some of them are very perfect. I restrain my enthusiasm as much as possible, so that you may not be disappointed when you reach the tombs of the kings and see specimens of the architecture of eight and ten centuries ago, by people who are now so feebly represented. What puzzles me beyond everything is that I can nowhere find the quarries from which the "world of stone pillars," a old Knox describes the place, have been taken.

Water, water, water, give these people water, and you may make anything of them, but without a proper, wholesome supply of it, they must die out.

The noble tanks had been injured from want of science and skill in their original projectors in not providing sufficient means of carrying off the surplus waters during the rainy season. I urged the Government to take active steps for the preservation of what was left of these great works, and pointed out how sadly the cultivation of rice, and the consequent health of the population, were suffering from the want of water, which in a tropical climate constitutes the vitality of the people and the wealth of the country.

Sir Robert Wilmot Horton adopted my views with eagerness, and proposed that I should become the "Regenerator of Nuwarakalawa," by devoting myself to the repair of these tanks. It would have been a work worthy of anyone's energies; but when I went into the matter with the Governor we found that the revenue of the Colony—then only £369,437

—was too small to hold out any hope that the work of restoration could be carried out on a scale which would ensure success, and he agreed with me that it would better not to touch it at all, than to begin and fail to carry it out.

It was my good fortune to proclaim in Nuwara-kalawa the new charter and the abolition of compulsory labour; an immense boon to the population of the island, of which for centuries it had been the curse. It had cost the last reigning Sovereign his throne and country, and had proved to the Chiefs a very great temptation to most cruel and unjust persecutions. I thought it unwise at the time to absolve the people entirely from any service to the Government, and suggested that a limited amount, say ten days in the year, which might be redeemed by a low rate of payment, to which all classes of the population would be liable, should be substituted for it. This measure, though on a still more moderate scale and under more favourable conditions than I had suggested, was in 1849, brought forward and carried through the Legislature by Sir Philip Wodehouse. It limited the labour which the Government had a right to call for from every member of the population to six days, one third of which was to be appropriated to minor works and village roads, two-thirds being appropriated to the principal roads of the island. This measure had the merit of extreme impartiality, as it applied to all ranks and classes, and the money commutation was so low that any man could pay it with the earnings of three days labour. The tax yielded about £50,000 a year, or in twenty-six years since it was established £1,200,000.

A TRIP TO ANURADHAPURA.

(*By a Visitor.*)

If a visitor bears in mind that there once existed on the northern plains of Ceylon, a city which covered

more ground than modern London, that that city was the religious capital of Buddhism, that it was peopled by a people who had great and unique skill in architecture, and were possessed of enormous wealth, that it was served by a system of irrigation works which display much cleverness in engineering, that its remains carry us back to 4 or 5 centuries before Christ, and are contemporaneous with the final years of the Old Testament history, then a visit to the jungles of the N. O. Province assumes a new interest. This enormous city lies buried under the foliage of a well-nigh impenetrable forest. From the rocky slopes of Mihintale the ruins may be traced for many miles towards the west, about 8 miles along this line, which of old was "the sacred road," are to be found the remains of half-a-dozen huge Dagobas, each containing enough bricks to build a moderate-sized city, and also a curious old tree which in spite of being worshipped, and watered with milk, and adorned with gold-leaf, still manages to live on in a picturesque and ragged old age. This tree and these dagobas mark the centre of Anuradhapura, the ancient capital of Ceylon, which probably stretched out its suburbs far away yet towards the North and the South and the West as well as the East by which way we have come from Mihintale. The chronicler tells us that it would take a man 4 hours to walk across it from the rising to the setting sun, and four hours likewise from the north to the south. This would make the city to have been 12 miles square or to consist of 144 square miles, but if the measurer were a rapid walker, these figures would have to be increased. Now, if an inquisitive traveller is told that this prodigious city has been buried for ages amid a dense jungle haunted by cheetahs and bears, but that its sites are now being explored and its ruined monasteries and shrines and palaces rescued from the tyranny of the forest growths, it is very natural that he should be fired with a desire to visit this mystical city and see for himself what

has been done, and what is yet to be done, and when there that he should be fascinated with the antiquarian problems that have tormented him.

The traveller finds himself put down in the midst of a vast jungle, on the edge of a thriving little village, and with ruins, ruins, ruins, everywhere. These ruins are, for the most part, mere groups of square ugly pillars which stick out in the gardens of the cottages, in the very compound of the resthouse, and here and there amid the jungle in whichever direction he likes to walk.

Ceylon may well be proud of its unique antiquarian puzzle. As soon as the railway to Gaffna makes the approach easier crowds of eager tourists will flock to it, and it is to be hoped that before then such arrangements will have been liberally made as will conduce to the conversation and the exploring of these ruins, and that it may then be easier for the visitor to understand the grand problems which a trip to Anuradbapura will set before him.

W. R. F.

Colombo, March 16th, 1891.



